ENVIRONMENTAL INDICATOR REPORT

CA 725 CURRENT HUMAN EXPOSURES UNDER CONTROL

W.G. KRUMMRICH PLANT
SAUGET, IL

VOLUME III

Prepared for
W.G. Krummrich Plant
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SOLUTIA

August 2003

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Air Sampling Report

TRC

Customer-Focused Solutions

RESULTS OF RCRA CA-725 ENVIRONMENTAL INDICATORS AIR QUALITY SAMPLING

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1.0 INTRODUCTION

TRC Environmental Corporation, under contract with Solutia, Inc., performed an air quality sampling program at Solutia's W.G. Krummrich plant in Sauget, Illinois to facilitate the completion of the Resource Conservation and Recovery Act (RCRA) Human Exposure Environmental Indicators (EI) report (CA-725). The sampling followed a field sampling plan (FSP) presented initially in December 2002 and modified on March 28, 2003 based upon U. S. Environmental Protection Agency (EPA) Region V comments. A copy of the final sampling plan is included as Attachment A.

All samples were collected over the period from March 29 through April 2, 2003. The sampling consisted of 15 soil vapor sample locations and interior locations of four buildings on the W.G. Krummrich plant site and five soil vapor sampling locations on adjacent properties. This report discusses the results of those samples and compares them to the EPA "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils" (Subsurface Vapor Intrusion Guidance) (67 FR 71169) and to Occupational Safety and Health Administration Permissible Exposure Limits (PELs). However, the comparison to the target indoor air concentrations given in the draft guidance is not considered to be the appropriate measure of risk evaluation in this case. The guidance document notes that "...EPA does not expect this guidance to be used in settings that are primarily occupational." It further notes that "OSHA and EPA have agreed that OSHA generally will take the lead role in addressing occupational exposures." Consequently, the OSHA PELs are considered to be more appropriate for evaluating worker risks arising from exposure to indoor air. Moreover, the target indoor air concentrations listed in Table 2 of the guidance document are based on application of a model in which the receptors at the surface are residents in homes. Thus, the target concentrations in Table 2 are more applicable to a residential exposure than to an occupational scenario.

To satisfy the requirements of the RCRA CA-725 process, the evaluations need to include all the pathways for human exposure from a potential underground source. Human exposure at the workplace is an end point of the air pathway, which this sampling seeks to define. This pathway starts with volatilization or partitioning of constituents from the dissolved plume in ground water below the site. Those constituents are then present as vapors in the soil. An extensive soil vapor sampling program that included simultaneous indoor/outdoor sampling

was conducted in and around specific buildings to determine if vapors from the ground water plume are present in the soil and if a potential human exposure pathway was "complete". If vapors occur in the soil, the pathway continues through the migration of those vapors to the buildings in which people work. Thus, it is the purpose of this sampling to determine whether such a pathway exists and, if so, to what extent any measurable indoor concentrations are due to this pathway or to other sources. It is important to recognize that sources from the outdoor environment and from within the building can also impact ambient indoor air quality. These other sources are independent of the potential underground sources.

2.0 INDOOR AIR QUALITY SAMPLING

Samples were collected at four buildings on the W.G. Krummrich plant site (the building locations are shown on the map, Figure 1 in Attachment B):

- BBZ - Storeroom
- BBG – West Shop
- CCB – East Shop
- BK – Administration Building.

These buildings were selected because plant personnel were assigned to these buildings to perform administrative functions (office work) and the buildings are not closed and designed with high volume air exchange systems. This design, which is used at the operations control buildings at the plant, minimizes migration of soil vapors into interior air spaces.

Indoor air samples were collected on March 29, 2003, when the buildings were being heated. Ambient temperatures during the indoor air sampling ranged from 41° - 46°F. Qualitative airflow measurements at exterior doorways confirmed that the buildings sampled were under negative pressure, the expected result in the heating season.

Samples were collected indoors over 8-hour periods in the buildings at locations within the breathing zones of workers. For three buildings, a sample was also taken simultaneously at the fresh air intake; at the fourth building (BBZ), a sample was collected at the air intake to the office area. This was necessary to differentiate between sources related to interior operations, ambient exterior air, and soil vapors. The sampling occurred during the weekend day shift to minimize the disturbance to the personnel working in the area and to obtain samples not affected by normal workday activities. By sampling during the weekend day shift, the possibility of sample contamination from another source (workers clothes and shoes) was greatly reduced.

Samples were analyzed using EPA Method TO-15 for the analysis of a list of target volatile organic compounds (VOCs), while Method TO-13 was used for semi-volatile organic compounds. The results are summarized in Table 2-1, and the laboratory reports are presented in Attachment C. None of the results were above the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs). Air concentrations were above the EPA target indoor concentrations at and only two locations. It is emphasized that TABLE 2-1 only contains the compounds that were detected in the samples. All compounds not listed in this table were not detected. A description of the results in each building is presented below.

Table 2-1:
Indoor/Outdoor Air Sampling Results (in ppbv)

Date of Sampling: March 29, 2003

	Target Indoor Concen -tration (ppbv)	OSHA PEL (ppbv)	Detection Limit (ppbv)	Building BBZ		Building BBG		Building CCB		Building BK Administration		
				Offices	Warehouse	Indoors	Outdoor Air at Bldg. Intake	Indoors	Outdoor Air at Bldg. Intake	Indoors 1st Floor	Indoors Basement	Outdoor Air at Bldg. Intake
Sample No. (abbreviated)				*BBZ-O*	*BBZ-I*	*BBG-O*	*BBG-I*	*CCB-O*	*CCB-I*	*BK-1st*	*BK-Dist*	*BK-1*
Method TO-15 Results												
Benzene	9.8	1,000	0.86	ND	ND	0.86*	ND	ND	0.92*	ND	ND	ND
Methylene Chloride	150	25,000	0.86	60	25	87	ND	440	3.1	13	24	2.2
Chlorobenzene	13	75,000	0.86	ND	ND	0.86*	ND	1.6	1.0*	ND	ND	0.94*
4-Methyl-2-Pentanone (methyl isobutyl ketone, MIBK)	20	200,000	3.4	130	160	5.4	ND	ND	ND	ND	ND	ND
Methyl Ethyl Ketone (2-butanone, MEK)	340	200,000	3.4	20	22	21	9.8	ND	ND	ND	ND	ND
Acetone	150	100,000	3.4	7.4	5.2	110	ND	20	3.4*	4.4	4	4.5

Method TO-13 semi-volatile organic compounds were not detected.
All samples collected on March 29, 2003.
"ND" indicates not detected (detection limits are below target concentrations).
* Sample is at or near detection limit

Building BBZ - Storeroom

This building is primarily a warehouse with offices and some small production areas. The offices chosen for sampling have a ceiling-mounted air handling system that draws and conditions air from inside the warehouse. Inside the offices, low concentrations of acetone, methyl ethyl ketone (MEK), and methylene chloride were detected. All of these concentrations were well below the target indoor air levels and the OSHA PELs. These compounds were also detected in the air intakes for the offices. The other compound detected, 4-methyl-2-pentanone (methyl isobutyl ketone or MIBK) was detected in concentrations above the target indoor air concentration listed in the Subsurface Vapor Intrusion Guidance, but orders of magnitude below the OSHA PELs. As with the other compounds detected in this building, a slightly higher concentration was measured at the air intake to the offices.

In addition, a soil vapor sample was taken immediately adjacent to the BBZ building (sample SVP-16). The result shows small amounts of MIBK (3.9 ppbv), but none of the other target compounds were detected. The next closest soil vapor sample, across the street approximately 100 feet to the east (SVP-12), did not contain any MIBK. MIBK was found in the soil vapors of SVP-14, which is some 1,000 feet north of the BBZ building.

Thus, it can be concluded that the MIBK found in Building BBZ offices most likely came from the ambient (outdoor) air or internally in the warehouse. It should be noted that over a million pounds of product is stored in the storeroom. The product is manufactured from various ketone compounds (including MIBK) and, as such, could be a source of MIBK due to offgassing. As well, the offices are used by personnel from the nearby manufacturing areas. As a consequence, there is continuous traffic into and out of the office areas. Further, all personnel who work in this area have undergone hazard awareness training and are familiar with the hazards of the workplace.

Building BBG – West Shop

The indoor air sample from Building BBG contained the following compounds:

- Benzene
- Methylene Chloride
- Chlorobenzene
- MIBK
- MEK

- Acetone

The concentrations of benzene and chlorobenzene were at the detection threshold and an order of magnitude below target concentrations. The concentrations of MIBK, MEK and methylene chloride were all below target indoor concentrations and the OSHA PELs. MEK was detected in the intake air sample, however no other compounds were detected in the building intake sample.

Building CCB - East Shop

The indoor air sample at this building contained methylene chloride above the target indoor air concentration, but almost two orders of magnitude below the OSHA PEL. There was also a trace concentration of methylene chloride in the intake air suggesting an outdoor air source was partly responsible. There were also low concentrations of chlorobenzene and acetone, but these compounds were also in the intake air suggesting that ambient air is at least a partial source. Acetone is a solvent that can be found as a component of cleaning or degreasing solutions at the shop. Benzene was found in concentrations near the detection limit in the intake air, but not inside the building.

Soil vapor sample SVP-9 was collected approximately 300 feet south of the CCB building (Note: Sample probe SVP-7, located adjacent to Building CCB, was saturated on the date of the sampling, so a vapor sample could not be collected). The sample from SVP-9 contained tetrachloroethene and 1, 2-dichlorobenzene. These compounds were not detected in Building CCB. Sample SVP-9 did not contain any methylene chloride. It is useful to note that methylene chloride was detected in all of the indoor air samples, but was not found in any soil vapor sample.

These data suggest that the compounds found in Building CCB most likely came from the ambient air or a source in the building. The latter source is considered to be the most likely. Methylene chloride has been commonly used as a degreaser in shop areas within the plant. Hence, it would not be surprising to detect it in indoor air at low concentrations.

BK Administration Building

Two samples were collected indoors at worker breathing zones in Building BK, one on the first floor and one in the basement. Methylene chloride and acetone were detected at concentrations below the indoor air target concentrations and the OSHA PELs. Acetone was

detected at a similar concentration in the intake air to the building; methylene chloride was also detected in the intake air at a concentration less than the concentration in the indoor air sample. Chlorobenzene was found in the intake air at concentrations near the detection limit. However, chlorobenzene was not found in the building.

The soil vapor sample next to the BK building (SVP-6) contained low concentrations of MIBK and acetone, but no detectable methylene chloride. MIBK was not detected in the building indoor air sample. This soil vapor sample contained tetrachloroethene (PCE) at concentrations above the target concentration for shallow soil vapor, but PCE was not detected in either the ambient air or the building interior air samples.

Ambient Air Samples

General ambient air samples were taken in conjunction with the soil vapor sampling, i.e., on the same dates and time of the soil vapor samples (refer to Figure 1 for the soil vapor sampling locations). These samples were taken on the east side of the plant (at soil vapor points SVP-9 and SVP-17) and on the west side of the plant (at soil vapor points SVP-1 and SVP-21). These samples showed small concentrations of chlorobenzene, 1,4-dichloroethane, acetone and methylene chloride. Acetone was detected in three of the four samples and the other compounds were detected in only one sample each. Table 2-2 shows these sample results. These samples confirm that these compounds are present in the general ambient air. However, the concentrations are well below both the target indoor air levels defined in the draft EPA guidance and the OSHA PELs.

2.1 Summary of the Indoor Air Sampling Results

With only two exceptions (discussed below) the measurements taken indoors in the four selected buildings showed concentrations below the EPA target concentrations for indoor air. Of all volatile organic compounds in the shallow groundwater, only five appeared in any building's intakes or indoor air. Two of these (benzene and chlorobenzene) were close to the detection limits and appeared infrequently. Acetone was often present both indoors and outdoors at relatively low levels. MEK and MIBK were present near the ketone production area and in the ambient air as well. Finally, methylene chloride was not found in the shallow soil vapors, but was present in the ambient air both indoors and outdoors. No semi-volatiles in the shallow ground water appeared in any of the indoor air samples.

Table 2-2:
Ambient Air Sampling Results (ppbv)

Method TO-15	Target Indoor Concentration	OSHA PEL	Detection Limit	Sampling Dates			
				March 31, 2003 (SVP-Background Sample-033103)	April 1, 2003 AM (Background Air Sample-040103-AM)	April 1, 2003 PM (Background Air Sample-040103-PM)	April 2, 2003 (SVP-23-SG-040203)
Methylene Chloride	150	25,000	0.98	ND	ND	ND	7.6
Chlorobenzene	13	75,000	0.96	ND	2.6	ND	ND
Acetone	150	100,000	3.8	ND	4.7	4.1	19
1,4 Dichloro-benzene			6.96	ND	1.5	ND	ND

"ND" represents not detected (detection limits are below target concentrations).

The methylene chloride in Building CCB is, most likely, from a source inside the building, although there is likely also some minor contribution from the ambient outside air. Similarly, the MIBK in the Building BBZ office air sample also appears to be from the ambient (warehouse) air. The source of the ambient air concentrations does not appear to be soil vapor in the areas near the Building BBZ.

In summary, therefore, although the indoor air in two of the four buildings sampled exceeded the target indoor air concentrations defined for a residential exposure scenario by the EPA Subsurface Vapor Intrusion Guidance, the concentrations were well below the applicable OSHA PELs, which are considered to be the appropriate standard. Further, the compounds detected in the buildings did not appear to be the result of volatilization from shallow groundwater. Rather, the source(s) of these compounds appear(s) to be the indoor and/or outdoor ambient air and, possibly, product stored within the buildings themselves.

3.0 SOIL VAPOR SAMPLING

A total of 20 soil vapor locations were sampled. Of these, 15 were on the plant and selected specifically for the purpose of determining the soil vapor concentrations that might result in vapor intrusion into buildings. The other five were grab samples taken along the benzene pipeline that runs from the plant toward the river to determine if the pipeline was a potential source of benzene leakage.

3.1 In Plant Soil Vapor Sampling

Seventeen soil vapor probes (SVP-1 through SVP-17) were installed at the approximate locations shown on the map in Attachment B. Although sampling was attempted at all locations, two locations (SVP-7 and SVP-13) could not be sampled due to saturated conditions on the date of sampling.

The analytical results are summarized in Table 3-1 and the laboratory reports are presented in Attachment C. Overall, eleven target VOCs were detected using Method TO-15; only one semi-volatile organic compound (SVOC) was detected using Method TO-13. The target shallow soil gas concentrations from the EPA's Subsurface Vapor Intrusion Guidance document are also listed in Table 3-1 next to the detected compounds. These target concentrations are considered to be screening levels for the potential for intrusion of the specific compounds into overlying or immediately adjacent buildings. However, it is emphasized that the screening is only relevant as an indicator of the possible intrusion into adjacent buildings. If no buildings are in the immediate vicinity of the sample location, or if sampling in an adjacent building does not result in the detection of the screened compound, then the screening exercise should not be used as an indicator of possible human health risk.

It should be noted that as part of the field and laboratory sampling procedures, a volatile tracer (tetrafluoroethane) was used to identify leaks in the sampling apparatus. That volatile tracer was detected in some samples, and those samples are noted in the "Comments" row of Table 3-1. In the instances where the tracer was detected, there is the possibility of leakage of ambient outdoor air into the sample during sampling or intrusion of laboratory air during analysis.

3.1.1 Samples With Elevated Results

There were two samples in which soil vapor concentrations were consistently above the

Table 3-1:
Soil Vapor Sampling Results (ppbv)

	Target Shallow Soil Gas Concentrations	Detection Limit	Concentration in Soil Gas Sample																
Sample Location (SVP-#):			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
									NOT SAMPLED						NOT SAMPLED				
Method TO-15:											D	D				D			
4-Methyl-2-pentanone (MIBK)	200	3.7	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND		72000	7.8	3.9	ND
1,1,1-Trichholoethane	4000	0.94	ND	ND	ND	ND	ND	ND		ND	ND	ND	170	9.8		ND	ND	ND	ND
Tetrachloroethene	48	0.94	ND	ND	1.9	ND	ND	150		1.1*	55	ND	92	2.9		ND	ND	ND	ND
Chlorobenzene	130	0.94	ND	ND	ND	ND	ND	ND		ND	ND	31000	ND	ND		2200	20	ND	ND
1,2-Dichlorobenzene	330	0.94	ND	ND	ND	ND	ND	ND		ND	46	870	ND	ND		ND	8.2	ND	ND
1,4-Dichlorobenzene	1300	0.94	ND	ND	ND	ND	ND	ND		ND	ND	4500	ND	ND		ND	3.2	ND	ND
Chloroform	22	0.94	ND	ND	ND	ND	ND	ND		11	ND	ND	ND	ND		ND	ND	ND	ND
Benzene	98	0.94	ND	1*	ND	ND	ND	ND		1.5	ND	680	ND	ND		1100	ND	ND	3.5
Acetone	1500	3.7	7.6	ND	ND	ND	ND	6.7		11	ND	ND	ND	ND		ND	ND	ND	11
Methylene Chloride	1500	0.94	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND	ND	ND	ND
2-Butanone (MEK)	3400	3.7	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND		ND	ND	ND	ND
Method TO-13			ND	ND	ND	ND	ND	ND			ND	ND	ND	ND			ND	ND	ND
Aniline	N/A	0.05**														0.43			
Comments					leak?						leak?								leak?

* Near Detection Limit
"ND" represents not detected (detection limits are below target concentrations except where noted with a "D" at the top of the column).
"N/A" Not Applicable
"Leak?" denotes where the tracer gas was detected in the sample, either from leakage during field sampling or during laboratory analysis
** Based upon a detection limit of 1 ug and an average sample volume of 20 liters

target concentrations. Soil vapor sampling point SVP-10 is in the southeastern corner of the plant. It is immediately above an area known to have shallow VOCs and SVOCs in high concentrations in ground water. This soil vapor sample contained benzene, chlorobenzene, and two isomers of dichlorobenzene in concentrations above the target concentrations. However, this sample is in an area that does not have nearby buildings and, thus, does not pose a potential human health risk from vapor intrusion into buildings.

The compounds do not appear to be migrating to the ambient air in any appreciable concentrations. All of the ambient air and indoor measurements contained only very small concentrations of two of these compounds (benzene and chlorobenzene) and neither of the two dichlorobenzene isomers was detected. One of the outdoor ambient air samples (at location SVP-9) was located within 500 feet of this soil vapor sampling point.

Sample SVP-14 is located in the ketone manufacturing area of the northwestern portion of the plant. The soil vapor sample at this location contained MIBK, chlorobenzene, and benzene. It also contained a small quantity of the semi-volatile aniline. There are no buildings near this sampling location and, hence, vapor intrusion will not be an issue. As with SVP-10, the benzene and chlorobenzene are not found in significant concentrations in any of the ambient air samples and it is unlikely that the soil vapors are escaping into the ambient air. Additionally, no aniline was found in the ambient air. MIBK was found in the BBZ and BBG buildings, although these buildings are far enough away that the SVP-14 location is an unlikely source for an airborne pathway to those buildings. Further, the SVP-14 soil vapor probe was installed through 3 to 4 inches of asphalt, meaning that it is highly unlikely that vapors are emitted to the ambient air at that location.

Tetrachloroethene (PCE) was detected above the target concentration at three locations (SVP-6, SVP-9, and SVP-11). Although PCE was detected in samples from locations SPV-6, next to the BK Building, and SVP-11, across the street from Building BK, no detectable tetrachloroethene was found in the air samples taken in or around this building. This suggests that even though tetrachloroethene is present in the soil vapors, it is not entering the building or mixing with the ambient air. At SVP-9, which is in the southeastern corner of the plant, the tetrachloroethene was reported at a concentration slightly above the target concentration. Again, it was not measured in Building CCB ambient indoor air sample or the intake air sample.

No other soil vapor samples contained any compounds that were detected at concentrations even approaching the target concentrations. In fact, only a limited number of

analytes were detected in any of the soil vapor samples.

3.2 Benzene Pipeline Samples

Five soil vapor samples were collected along the benzene pipeline and analyzed for target VOCs by Method TO-15 to determine the potential for soil vapor contamination by the pipeline. These samples were taken as grabs rather than by pumping from probes driven into the soil as was done on the plant site. A summary of the results is presented in Table 3-2 and the locations are shown on the map (Figure 1 in Attachment B). Only two analytes were detected, acetone and MEK, at concentrations which were orders of magnitude less than the target shallow soil gas concentrations.

Table 3-2:
Benzene Pipeline Soil Vapor Grab Samples (ppbv)

	Target Shallow Soil Gas Concentrations	Detection Limit	Concentration in Soil Gas Sample				
Sample Locations (SVP-#)			18	19	20	21	22
Method TO-15			**				
Acetone	1500	3.7	6.3	5.6	4.2	12	9
MEK	3400	3.7	8.4	11	5.5	ND	8

"**" denotes where the tracer gas was detected in the sample

"ND" represents not detected (detection limits are below target concentrations).

4.0 DATA QUALITY ISSUES

4.1 Samples Collected

The indoor/building intake sampling was completed at all the intended locations. During the initial installation of the soil vapor probes, one of the planned locations, adjacent to the BBG building, was omitted However, since the results from the sample collected within the BBG Building were all less than the target indoor concentrations, no soil vapor data was necessary at that location and the probe was not subsequently installed..

Two soil vapor sample locations were abandoned because the soil vapor probe filled with water. One of these, SVP-7, was also next door to a building (CCB). Since the issue at CCB is methylene chloride and methylene chloride was not detected in any the other soil vapor samples, it is reasonable to conclude that it is not present at SVP-7. The other site which was abandoned was SVP-13, near the previous location of a benzene tank and over areas identified with high shallow ground water concentrations. SVP-2 is less than 200 feet west of SVP-13. Benzene was the only compound detected in this sample, at a concentration close to the detection limit. The sample from SVP-15, to the southeast of SVP-13, contained only minor concentrations of a few compounds.

The volatile tracer gas (tetrafluoroethene) was detected in four samples at concentrations up to 2,100 ppbv. The presence of the gas indicates leakage either during field sampling, when ambient outdoor air could have entered the sample, or during laboratory analysis, when ambient laboratory air could have entered the sample. In either case, the results at these locations may not be entirely representative of soil vapor concentrations, as acetone, methylene chloride, chlorobenzene, and 1,4-dichlorobenzene were detected in the background air samples.

Method TO-13 was added to the sampling program to obtain data on semi-volatile compound concentrations. The sample preservation methods employed were not consistent with the method in all respects. It was noted by the laboratory that all samples were not refrigerated and not returned to the laboratory in the original reflective sleeves. The use of the sleeves would reduce the likelihood of absorbing contaminants from the plastic shipping bag. The detection of aniline in only a few samples and not in the field blank suggests that this error did not compromise the samples. Refrigeration would reduce the likelihood of organic compound degradation or volatilization loss between collection and analysis. The short sample turnaround times (72 hours) and the use of Method TO-15 for the VOCs should minimize the influence of

this error on data quality. Icing was done on the second set of soil vapor samples sent to the laboratory and no semi-volatile, other than aniline, was detected. Consequently, although these deficiencies are noted, it appears unlikely that they compromised data quality.

Duplicate samples were taken daily throughout the soil vapor sampling exercise. In addition, an indoor air duplicate sample was taken in the basement of the administration building (BK) and a background air duplicate sample was collected. The duplicate sample results are as follows:

Indoor Air Sample Duplicate Comparison (ppbv) (Building BK-Basement)			
Analytes	**Original**	**Duplicate**	**Ratio**
Acetone	4.0	4.1	1.03
Methylene Chloride	24	18	0.75

Background Air Sample Duplicate Comparison (ppbv) (SVP-23/SVP-23 Duplicate)			
Analytes	**Original**	**Duplicate**	**Ratio**
Acetone	19	18	0.95
Methylene Chloride	7.6	7.3	0.96

Soil Vapor Sample Duplicate Comparison (ppbv)			
Samples/Analytes	**Original**	**Duplicate**	**Ratio**
SVP-10 / SVP-100			
Benzene	680	660	0.97
Chlorobenzene	31000	32000	1.03
1,2-Dichlorobenzene	870	810	0.93
1,4-Dichlorobenzene	4500	4400	0.98
SVP-14 / SVP-140			
Benzene	1100	1100	1.00
Chlorobenzene	2200	2300	1.05
MIBK	72000	75000	1.04
Aniline	8.6	6.4	0.74
SVP-4/SVP-4 Duplicate	all non-detect	all non detect	
SVP-12/ SVP-12 Duplicate			
1,1,1-Trichloroethane	9.8	9.4	0.96
Tetrachloroethene	2.9	2.8	0.97
SVP-8/SVP-8 Duplicate			
Chloroform	11	11	1.0
Benzene	1.5	1.6	1.07
Tetrachloroethene	1.1	1.1	1.0
Acetone	11	12	1.09

All trip blanks and laboratory blanks had no detections of any analyte.

5.0 CONCLUSIONS

The intensive sampling of soil vapor, indoor ambient air, and outdoor ambient air conducted during March 29 through April 2, 2003 leads to the following conclusions:

- The impacted shallow groundwater beneath the W. G. Krummrich plant is not resulting in unacceptable indoor air quality at the plant. In two process area buildings (BBZ and CCB), VOCs were detected in the office area samples at concentrations above the EPA target indoor concentrations (MIBK and methylene chloride, respectively), but well below the OSHA PELs for these compounds. The draft EPA Subsurface Intrusion Guidance notes that these target indoor air concentrations are not intended for use in industrial exposure scenarios and that OSHA guidelines are more appropriate in these circumstances. The presence of these compounds is apparently due to outdoor air sources and/or sources within these buildings. The analytical results for the soil vapor sample collected adjacent to Building BBZ (SVP-16) supports the conclusion that soil vapor is not the primary source of the VOCs detected in the indoor air. In the case of Building CCB, the only analyte which exceeded the target indoor air concentration was methylene chloride, which was detected in all the indoor air samples and none of the soil vapor samples, suggesting a common indoor source. A soil vapor sample was not collected immediately adjacent to Building CCB for comparison, due to an apparently high water table on the date of sampling, but the nearest soil vapor sample, approximately 300 feet from the building, did not contain methylene chloride. In both cases, the measured concentrations in indoor air are well below the OSHA PELs.

- Indoor air samples collected from Buildings BBG and BK (administration building) did not contain target analytes at concentrations above the EPA target indoor concentrations.

- Benzene, chlorobenzene, or isomers of dichlorobenzene (the largest components of the plumes in ground water below the site) were not found in significant amounts in any of the buildings. The amounts found were slightly above the detection limits and were orders of magnitude below the EPA target indoor concentrations and the OSHA PELs. The logical source for those minimum detectable concentrations found is the ambient air.

- The soil vapor sampling showed five locations with concentrations above the EPA soil vapor target concentrations. These samples were not located in areas with buildings and there is no evidence of migration (either through the soil, or in the air) to the buildings sampled. One of these sample points was below an asphalt cover.

- The benzene pipeline does not appear to be leaking to the soil.

Attachment A

Field Sampling Plan and Field Data Summary Sheets

Soil Vapor Probe Installation and Sampling Protocol

Sampling Objective/Approach

Soil vapor samples will be collected at the 17 on-site locations. The intent is to collect samples during cold weather (March) and warm weather (June), so permanent soil vapor sampling probes will be installed.

In areas above the plume where no buildings are present or where buildings are built on slab, shallow soil vapor samples will be collected at a probe depth of 5 to 6 feet below grade, which will place the probe sufficiently deep to minimize temperature and barometric pressure fluctuations. In areas above the plume where buildings with basements or lower levels are present (Building BK, the main office building), soil vapor samples will be collected at a probe depth at or below the lowest floor or basement level. The soil vapor implant depths will be targeted to more-permeable soil zones within the target depths. In the event that water-saturated conditions are encountered at or above the target probe depth, the probe depth will be modified to above the depth of saturation.

Probe Installation and Sampling Equipment

The following equipment is recommended for soil vapor probe installation and soil vapor sampling:

- direct-push drilling rig with Geoprobe™ Macrocore sampler, acetate liners, probe tip, and probe rods;
- Geoprobe™ stainless-steel implant (AT 86, or similar), 6" length;
- Geoprobe™ implant anchor (PR14 or equivalent);
- Geoprobe™ glass beads (AT84), or clean silica sand;
- flexible Teflon tubing, 1/4-inch outer diameter;
- flexible Tygon tubing of appropriate sizes to connect drive tubing to SUMMA canister and to the sorbent-media tubes;
- tubing fittings: plugs, ferrules, nuts, 'T's;
- SUMMA canister (6 liter) with vacuum gauge and restrictive inlet (45-minute and 90-minute fill time);
- bentonite (granular or powdered) and potable water;
- wind socks or flags;
- narrow metal tape measure or foldable fiberglass ruler;
- decontamination equipment;
- volatile tracer gas (tetrafluoroethane) in cans;
- field book, data logging forms, and chain-of-custody forms;
- flags, stakes, or other means to mark and label sampling locations;
- health and safety gear appropriate to the job; and
- miscellaneous tools (wrench, scissors, knife).

In addition, soil samples will be collected from the probe depths at the boring locations near the four buildings for analysis for total organic carbon and moisture content. Laboratory-prepared sample bottles, sampling spatulas, insulated coolers, ice and plastic bags (or blue ice), and packing materials will also be required equipment.

Sampling Point Installation Procedures

The soil vapor probe construction is depicted in Figure C-1. Placement of the soil vapor probes will proceed as follows:

- Identify and mark the vapor probe locations in advance; Solutia personnel will clear all locations for the presence of utilities. Label locations with unique identification numbers.
- Core pavement at paved locations to allow placement of a protective valve box upon completion.
- Advance the Macrocore sampler to the desired depth and withdraw the sampler; log the sampler return at locations where logs are not available.
- Collect and log the soil sample from the probe depth at the four boring locations near buildings. The sample will be collected directly from the acetate liner and placed into laboratory-supplied sample jars for analysis for total organic carbon and moisture content. Preserve the soil samples by storing and shipping on ice (4^0C).
- Assemble the probe anchor, probe implant, and tubing (include sufficient excess tubing length to protrude from the upper end of the drive tubing) into a probe assembly.
- Install the anchor end of the probe assembly to the desired depth within the borehole either manually or by using the probe rods (use of the probe rods will be required if the boring collapses). Measure the depth to the probe implant.
- Backfill the annular space around the probe implant with glass beads; if the borehole collapses, the probe assembly will be installed into the probe rods and the implant will be advanced to the desired depth; the backfilling would then be accomplished through the probe rods.
- Similarly, backfill the remainder of the annular space to within approximately one foot of grade with bentonite chips, slightly hydrating the chips every six inches when constructing in an open hole, or hydrating upon withdrawal of the probe rods (to avoid bridging), if constructing within the probe rods.
- Cap the upper end of the tubing as soon as possible in the procedure.
- Secure the top of the installation by installing a valve box or a protective casing, as appropriate for the location.
- Secure the upper end of the tubing within the valve box or protective casing.

- Decontaminate downhole equipment which contacts the soil by washing with lab-grade detergent and potable water and rinse with potable water.

A written record will be kept of the sampling point depth and construction.

Soil Vapor Sampling Procedures

Soil vapor sampling will proceed several days following the sampling point installation using the procedures described below. The soil vapor samples will be collected and analyzed for several volatile organic compounds and several semivolatile organic compounds, as listed below:

Volatile Organic Compounds (VOCs) by Method TO-15	Semi-Volatile Organic Compounds (SVOCs) by Method TO-13
bromodichlorobenzene	aniline
carbon disulfide	chloroaniline
1,1-dichloroethane	phenol
chloroform	chlorophenol
methylene chloride	dichlorophenol
vinyl chloride	nitrochlorobenzene
tetrachloroethane	trichlorophenol
trichloroethene	nitrobenzene
1,2-dichloroethene	pentachlorophenol
naphthalene	
chlorotoluene	
bromoform	
tert-butylbenzene	
benzene	
chlorobenzene	
1,2-dichloroethane	
1,1,1-trichloroethane	
acetone	
2-butanone (MEK)	
methyl isobutyl ketone (MIBK)	
o-dichlorobenzene	
p-dichlorobenzene	

The variety of analytes will necessitate the use of two sample collection devices: 1) SUMMA canisters and 2) sorbent media. Analyses will be conducted using USEPA Methods TO-15 and TO-13, respectively, by Air Toxics, Inc. of Rancho Cordova, CA. The two sampling methods will be employed sequentially: first by SUMMA canister followed by collection on the sorbent media. The samples collected by SUMMA canisters will be collected over a period of 45 minutes (flow rate of 0.11 liters/minute) using a flow-restrictive inlet. The samples collected on sorbent media will be collected using pre-calibrated air pumps and laboratory-supplied media; the duration of sampling will be approximately 120 minutes or more, sufficient to draw 20 liters of soil vapor

across the collection media at a rate of less than 0.2 liters/minute (lpm). Sampling times will be doubled and flow rates will be halved for the duplicate samples.

- Note the wind direction at the sampling location and record.
- Screen the ambient air with a PID and record reading.
- Connect the pump to the probe apparatus.
- Start the pump, and evacuate a volume equal to three to five sampling apparatus volumes at a low flow rate (0.2 lpm or less); record the flow rate and duration and calculate the volume removed.
- Wait for the vacuum to dissipate in the tubing.
- Remove the pump and immediately connect the SUMMA canister and 45-minute flow restrictor to the probe tubing (use 90-minute flow restrictor and Teflon 'T' for duplicate samples). Record the canister number.
- Open the valve to the SUMMA canister. Record the time.
- During the first five (5) minutes of sampling, periodically direct the tracer gas liberally around the tubing connections and around the well head.
- Return to recover the canister within 45 minutes after initiation of sampling (90 minutes for the duplicate samples).
- Close the valve to the SUMMA canister. Close the valve on the tracer gas cylinder.
- Open one sorbent media tube and break the seals; attach the downstream side to the intake side of the pump.
- Remove the SUMMA canister and immediately install the sorbent-media and pump assembly using a short length of Tygon tubing or a Teflon union.
- Start the pump at a low flow rate (target rate of 0.15 liters/minute) and record the time and flow rate. (When collecting the duplicate sample, set each of the pumps at a flow rate of less than 0.075 liters/minute, so the total withdrawal rate is approximately 0.15 liters/minute).
- Remove the flow restrictor from the SUMMA canister and pack the canister for shipping.
- Operate the pump for a sufficient duration to pull 20 liters of soil vapor across the media; record the pumping rate and duration.
- Record the pump serial number.
- Remove and cap the sorbent-media tube. Pack tube for shipping.
- Post-calibrate the pump at the end of each sampling day.
- Cap the tubing and secure the probe head.

Site conditions at the time of sampling, such as ambient air temperature and wind direction, will be recorded frequently during the sampling day. An example field data form is attached. The barometric pressure for the sampling period will be obtained from the nearest weather recording station (Lambert-St. Louis International Airport, St. Louis, MO) and barometric pressure readings will also be collected using an on-site barometer. In the event of a soaking rain, sampling will be postponed until 12 hours after the rainfall event.

Quality Assurance/Quality Control

Care will be taken to avoid possible sources of cross contamination (e.g., gasoline, solvents, etc.) during on-site storage of sampling media. In addition, care will be taken to keep vehicles away from sampling locations during sampling set up and during sampling.

One potential interference in implementing the soil gas sampling procedure is the possibility of atmospheric air entering the sampling train and the sample. This will be minimized by construction of a bentonite seal above the sampling inlet at all locations. A tracer gas will be used at the well head of at least 50% of the wells to check for leakage. In addition, the number of tubing connections will be minimized. Ambient air samples (morning and afternoon of each sampling day) will also be collected.

Contamination of sample containers, such as inadequate canister cleaning or contamination during shipping, are possible sources of sample interference. To address this concern, the laboratory will certify the canisters and a canister blank will be collected. This canister blank will also serve as a trip blank for the SUMMA canisters. A trip blank will also be collected for the sorbent media tubes.

Duplicate samples will be collected to assess analytical reproducibility.

These quality assurance samples will be collected as follows:

Ambient Air/Background Sample: Two samples of ambient air (morning and afternoon) will be collected associated with each day of sampling. A location will be selected in the vicinity of one of the sampling probe locations. The samples will be collected simultaneous to the collection of the soil vapor sample by attaching the flow inlet to the SUMMA canister, setting the intake to a height of two feet above grade, and opening the valve to allow filling at a rate similar to the soil vapor sampling rate. The sample for semivolatile organic analysis using sorbent media will be collected using a calibrated pump.

Duplicate Samples: Duplicate samples will be collected at a rate of one in twenty or a minimum of one per day. Locations above the plume will be selected for the duplicate samples. A 'T' will be installed on the soil vapor probe tubing instead of the straight-line connector and two SUMMA canisters will be attached, allowing the simultaneous connection of two SUMMA canisters over a 90-minute period. Similarly, for the collection of a duplicate sample for semivolatile organic analysis, and separate tubes and pumps will connected to the 'T' to allow simultaneous sampling.

Trip Blank/Canister Blank: Each batch of SUMMA canisters, since they are reusable and subject to decontamination at the laboratory, will certified clean by the laboratory. In addition, one canister per shipment, to be labeled "trip blank"-mm/dd/yy, will remain empty (under negative pressure) during the trip to and

from the field. The trip/canister blank will be packaged along with the soil vapor samples for the return trip to the laboratory for analysis. Upon arrival at the laboratory, it will be filled in the laboratory with lab-grade nitrogen and submitted for analysis. The trip blank for the sorbent media will be prepared by uncapping an unused tube, breaking the ends, capping the tube, and labeling and packing the tube for shipment (this will serve as both a check on field and shipping conditions).

Samples will be analyzed by the laboratory within 48 hours of receipt or within 72 hours of sample collection.

Sample Labeling and Handling

Sample canisters and sorbent media will arrive from the laboratory in a shipping carton.

All samples will be uniquely labeled using a consistent sample-numbering system which will differentiate these samples from other media collected from the same sample locations, as follows

For soil gas samples:

Sample location-media-date, e.g., xxxx-SG-03/28/03

For soil samples, the sample depth (in feet below grade) will be included in place of the date:

Sample location-media-depth, e.g., xxxxx-SOIL-2-3

The ambient air blank and duplicate samples will be blind-labeled. The samples will be re-packaged in the shipping cartons for return shipment from the site to the laboratory, and will be shipped overnight delivery using common carrier. The canisters and sorbent tubes will be packed to prevent breakage; no additional packing, such as ice or cold packs, is required. All sample shipments will be accompanied by a chain-of-custody form noting sample numbers, sample times, requested analyses/methods, sampler names, and signatures of sample handlers.

The lead sampler will notify the laboratory of the shipment of the samples to the laboratory and will confirm arrival.

References:

"How to Collect Reliable Soil-Gas Data for Risk-Based Applications, Part 1: Active Soil Gas Method", Blayne Hartman, LUSTLine Bulletin, October 2002.

Soil Vapor Sampling Field Form: Probe#_____

Sample No.:_____ **Date:**_____

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant
Sauget, IL

Samplers:_____

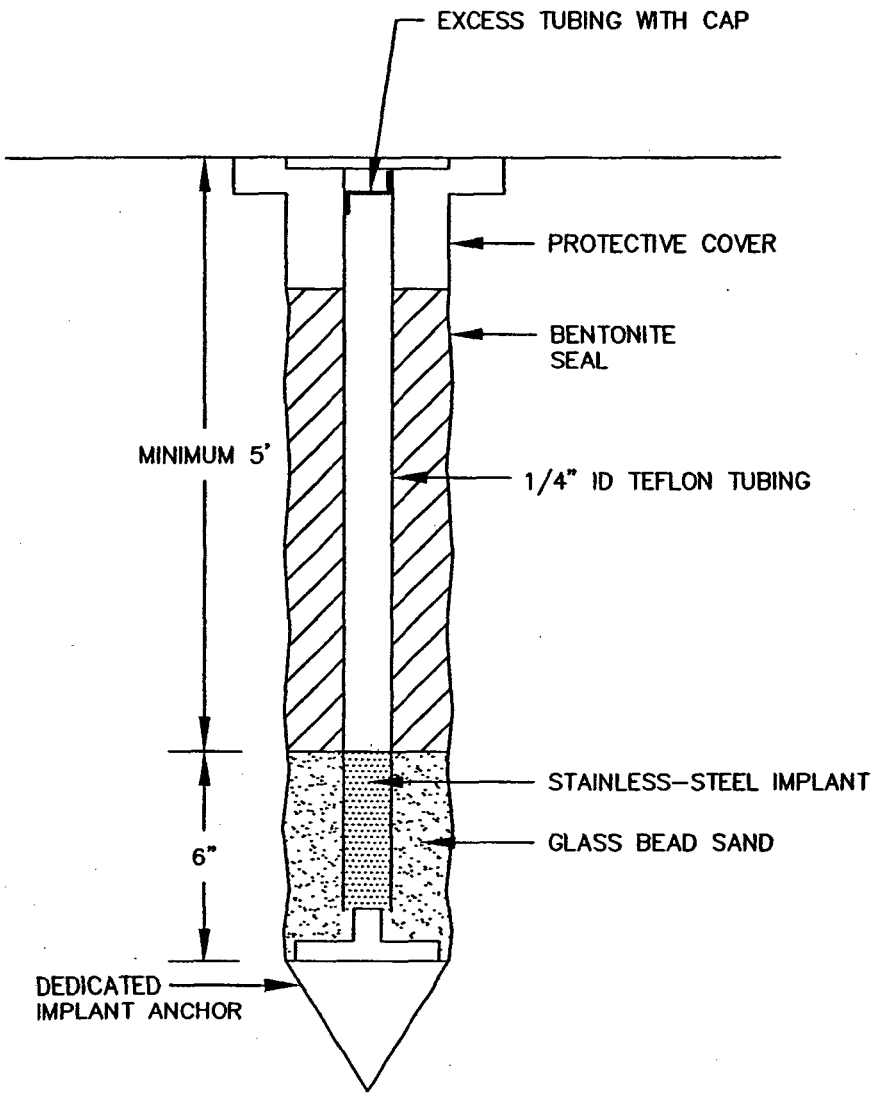
Volatile Organic Compound Sampling		**SemiVolatile Organic Compound Sampling**	
Pump No.		***Pump No.:***	
Purge rate (cc/min):		***Purge rate (cc/min):***	
Purge duration (min):		***Target purge duration (min)***	
Purge volume (cc):		***Purge start time:***	
Canister No.:		***Purge finish time:***	
Flow restrictor (min):		***Actual purge duration (min):***	
Start time:		***Sample no.:***	
Start vacuum reading (mm Hg):		***Duplicate sample?:***	
Finish time:		***Duplicate sample no.:***	
Finish vacuum reading (mm Hg):			
Tracer used?:			
Duplicate sample?:			
Duplicate canister no.:			

Notes (ambient temperature, barometric pressure reading and time, modifications to sample train, etc.):

_____

_____

_____



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SOLUTIA INC.
SAUGET, ILLINOIS

SOIL GAS SAMPLING POINT CONSTRUCTION

Date: 12/18/02 | Project No. 38182-0000-00000

38182\D-1

Table 1
SOIL GAS SAMPLING POINT CONSTRUCTION SUMMARY
SOLUTIA - SAUGET, ILLINOIS
MARCH, 2003

Soil Gas Sampling Location ID	SVP-1	SVP-2	SVP-3	SVP-4	SVP-5	SVP-6	SVP-7	SVP-8	SVP-9	SVP-10	SVP-11	SVP-12	SVP-13	SVP-14	SVP-15	SVP-16	SVP-17
Date of Installation	3/20/03	3/20/03	3/20/03	3/20/03	3/20/03	3/20/03	3/20/03	3/20/03	3/21/03	3/21/03	3/21/03	3/21/03	3/21/03	3/21/03	3/21/03	3/21/03	3/21/03
Type of Protective Cover	Stick-up	Stick-up	Stick-up	Stick-up	Road Box	Road Box	Road Box	Road Box	Road Box	Road Box	Road Box	Road Box	Road Box	Road Box	Road Box	Road Box	Road Box
(All units in feet below grade)																	
Total Boring Depth	6.08	6.08	6	6.08	6.08	12	5.5	5.5	4.75*	6.5	6.08	6.08	5*	5.5	6.17	5*	5**
Depth Interval of Bentonite Seal	0 - 5.3	0 - 5.3	0 - 5	0 - 4.83	0.5 - 5.17	0.5-10.5	0.5 - 4.75	0.5 - 4.5	0.5 - 4	1.5 - 5.83	0.5 - 5.33	0.5 - 5.17	0.5 - 4	0.5 - 4.67	0.5 - 4.92	0.5 - 4.25	0.5 - 4.17
Depth Interval of Implant	5.5 - 6	5.5 - 6	5.5 - 6	5.5 - 6	5.5 - 6	11.5 - 12	5 - 5.5	5 - 5.5	4.25 - 4.75	6 - 6.5	5.5 - 6	5.5 - 6	4.5 - 5	5 - 5.5	5.5 - 6	4.5 - 5	4.4 - 4.9
Depth Interval of Glass Bead Sand	5.3 - 6	5.3 - 6	5 - 6	4.83 - 6	5.17 - 6	10.5 - 12	4.75 - 5.5	4.5 - 5.5	4 - 4.75	5.83 - 6.5	5.33 - 6	5.17 - 6.08	4 - 5	4.67 - 5.5	4.92 - 6.17	4.25 - 5	4.17 - 4.92

Solutia
Proj # 38182-
Dennis P. Ryder
Field Notes – 3/29/03

BK Building

Barametric Pressure:

- Exterior of building = 29.92
- Inside Distribution area = 29.96
- Inside Rick Moore Office (1st floor) = 29.96

Temperature: (^{0} F)

- Exterior of Bldg = 41.8
- Inside of Dist area = 70.3
- Inside of Rick Moore Office (1st Floor) = 70.0

Air Flows: (fpm)

- From exterior into Dist Areas = 150
- From Training area into Dist Area = 50
- From Rick Moore Office into outer common area = 20
- From exterior into intake of AHU (on roof) = 150 (area of intake = 7' * 4')

Note:

- Distribution Area has tile floor and finished walls (Basement area)
- 1st floor Office areas have tile floors and finished walls
- AHU is located on roof

CCB Building

Barametric Pressure:

- Exterior of building = 29.92
- Interior of office = 29.92

Temperature: (^{0} F)

- Exterior of building = 41.9
- Interior of office = 71.4

Air Flows: (fpm)

- Exterior into firetruck bay area = 300
- From office into firetruck bay area = 25
- From office into shop area = 25
- Exterior into shop area = 200

Note:

- Office area has tile floors
- Shop area & fire truck bay areas have cement slab
- Walls are cinder block

BBG Building

Barametric Pressure:

- Exterior of building = 29.93
- Inside of office = 29.90

Temperature: (^{0} F)

- Exterior of building = 46.1
- Inside of office = 59.6

Air Flows: (fpm)

- From office to shop area = 140
- From exterior into shop area = 400

Note:

- Cement floor in office area
- Space (approx ½ inch) where slab meets cinder block walls
- No visable cracks in floor

BBZ Building

Barametric Pressure:

- Office area = 29.89
- storage area = 29.88
- exterior of bldg = 29.89

Temperature: (^{0} F)

- storage area = 69.6
- exterior of bldg = 49.7
- inside office area = 67.7
- at AHU intakes = 72.2

Air Flows: (fpm)

- from storage area into office area = 25
- At AHU intake = 25
- From exterior into storage area = 325

Note:

- The AHU for the Office Area is located on the office roof. The office & office roof are located within the BBZ building. The air-intakes for the office AHU are located in the BBZ building.
- Some minor cracks in slab
- Gaps (approx ½ inch) where slab meets exterior walls (block)
- Office area has tile floor-painted cinder block wall

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-1 **Date:** 4/1/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL & ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1349
Canister No.:	33876	*Purge finish time:*	1604
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	1246	*Sample no.:*	SVP-1-SG-040103
Start vacuum reading (mm Hg):	28.5	*Duplicate sample?:*	N
Finish time:	1331	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):			
Tracer used?:	—		
Duplicate sample?:	N		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

BP = 29.5 PID = Ø

temp: 72

Wind = from S

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-2 **Date:** 4/1/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: M. Danzella

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	0899	*Pump No.:*	3553
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1135
Canister No.:	22501	*Purge finish time:*	1350
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	1047	*Sample no.:*	SVP-2
Start vacuum reading (mm Hg):	29	*Duplicate sample?:*	No
Finish time:	1132	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	9		
Tracer used?:	Yes		
Duplicate sample?:	No		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

Baram. Press – 29.5 PID = 0

Temp – 79

Wind from SE

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-3 **Date:** 4/1/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: M. Donzella

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	0899	*Pump No.:*	9345
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1146
Canister No.:	405	*Purge finish time:*	1401
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	1100	*Sample no.:*	SVP-3
Start vacuum reading (mm Hg):	28	*Duplicate sample?:*	No
Finish time:	1145	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	7		
Tracer used?:	Yes		
Duplicate sample?:	No		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

Barom. Press. — 29.5 PID = 0

Temp. — 79

Wind from SE

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-04 **Date:** 4/01/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KLS ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	0850
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1145
Canister No.:	45679	*Purge finish time:*	1400
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	1053	*Sample no.:*	SVP-4-SG-040103
Start vacuum reading (mm Hg):	28.5	*Duplicate sample?:*	No
Finish time:	1138	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	8.0		
Tracer used?:	Yes		
Duplicate sample?:	No		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

BP = 29.55 PID = Ø

Temp = 70°C

Wind = from SW

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-5 **Date:** 4/1/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL ; ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	3456
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	0926
Canister No.:	12003	*Purge finish time:*	1141
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	0837	*Sample no.:*	SVP-5-SG-040103
Start vacuum reading (mm Hg):	28.5	*Duplicate sample?:*	N
Finish time:	0922	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	8.5		
Tracer used?:	Yes		
Duplicate sample?:	N		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

BP: 29.55 PID = Ø

temp = 66°C

Wind from SW

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-6 **Date:** 3/31/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: M. Donzella

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	3546
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1530
Canister No.:	945	*Purge finish time:*	1745
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	1443	*Sample no.:*	SVP-6
Start vacuum reading (mm Hg):	29	*Duplicate sample?:*	No
Finish time:	1528	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	9		
Tracer used?:	Yes		
Duplicate sample?:	No		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

Wind from SE

Barometric Pressure - 29.65

Temp - 65

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-8 **Date:** 3/31/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: ML/KL

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	3175
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1200
Canister No.:	1052	*Purge finish time:*	1415
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	1110	*Sample no.:*	SVP-8-SG-033103
Start vacuum reading (mm Hg):	29.0	*Duplicate sample?:*	No
Finish time:	1159	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	8.0		
Tracer used?:	Y		
Duplicate sample?:	N		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

BP = 29.8 PID = 0 ppm

Temp = 61.0

W = SE

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-9 **Date:** 3/31/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL & ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	3181
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1550
Canister No.:	433	*Purge finish time:*	1805
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	1457	*Sample no.:*	SVP-9
Start vacuum reading (mm Hg):	28.5	*Duplicate sample?:*	—
Finish time:	1542	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	8.5		
Tracer used?:	Yes		
Duplicate sample?:	—		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

BP = 29.65 PID = Ø

Temp = 60° F

Wind from South

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-10/SVP-100 **Date:** 3/31/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL & ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	3187 / 0283 Dup.
Purge rate (cc/min):	200	*Purge rate (cc/min):*	75
Purge duration (min):	2	*Target purge duration (min)*	270
Purge volume (cc):		*Purge start time:*	1421
Canister No.:	9201	*Purge finish time:*	1851
Flow restrictor (min):	60	*Actual purge duration (min):*	270
Start time:	1312	*Sample no.:*	SVP-10
Start vacuum reading (mm Hg):	30/29	*Duplicate sample?:*	Yes
Finish time:	1412	*Duplicate sample no.:*	SVP-100
Finish vacuum reading (mm Hg):	8/9		
Tracer used?:	Yes		
Duplicate sample?:	Yes		
Duplicate canister no.:	33989		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

BP: 29.7 PID: Ø

temp: 65°C

Wind: from SE

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-11 **Date:** 3/31/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: M. Donzella

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	3534
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1550
Canister No.:	31147	*Purge finish time:*	1805
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	1503	*Sample no.:*	SVP-11
Start vacuum reading (mm Hg):	28.5	*Duplicate sample?:*	No
Finish time:	1548	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	8.5		
Tracer used?:	Yes		
Duplicate sample?:	No		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

Wind from SE

Barometric Pressure - 29.65

Temp - 65

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-12 **Date:** 3/31/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: M. Donzella

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	0899
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1043
Canister No.:	6993	*Purge finish time:*	1258
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	9:56	*Sample no.:*	SVP-12
Start vacuum reading (mm Hg):	28.5	*Duplicate sample?:*	No
Finish time:	1041	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	8.5		
Tracer used?:	Yes		
Duplicate sample?:	No		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

Barometric pressure - 29.8

Temp - 58 Strong sulfur odor

Wind from SE in the air

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-14 **Date:** 4/1/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: M. Donzella

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	0899	*Pump No.:*	3187 / 344
Purge rate (cc/min):	200	*Purge rate (cc/min):*	75
Purge duration (min):	2	*Target purge duration (min)*	270
Purge volume (cc):		*Purge start time:*	919
Canister No.:	9563	*Purge finish time:*	1349
Flow restrictor (min):	60	*Actual purge duration (min):*	270
Start time:	816	*Sample no.:*	SVP-14
Start vacuum reading (mm Hg):	29 / 26	*Duplicate sample?:*	Yes
Finish time:	916	*Duplicate sample no.:*	SVP-140
Finish vacuum reading (mm Hg):	8.5 / 4		
Tracer used?:	Yes		
Duplicate sample?:	Yes		
Duplicate canister no.:	20935		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

Barom. Press. — 29.5 PID = Ø

Temp. — 65

Wind from SE

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-15 **Date:** 3/31/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KLS ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	3546 ~~3575~~
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1149
Canister No.:	20997	*Purge finish time:*	1404
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	1100	*Sample no.:*	SVP-15-SG-033103
Start vacuum reading (mm Hg):	29.0	*Duplicate sample?:*	N
Finish time:	1145	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	9.0		
Tracer used?:	Yes		
Duplicate sample?:	N		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

Wind from SE

temp = 60°F

barometric pressure = 29.80

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-16 **Date:** 3/31/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL, ML, MD, DR

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	3534
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1022
Canister No.:	1621	*Purge finish time:*	1237
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	0937	*Sample no.:*	SVP-16-SG-033103
Start vacuum reading (mm Hg):	29.0	*Duplicate sample?:*	N
Finish time:	1022	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	8.5	Barometric pressure: 29.8 temp: 58°F	
Tracer used?:	Yes		
Duplicate sample?:	N		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

Wind from SE

Soil Vapor Sampling Field Form

Vapor Probe No.: SVP-17 **Date:** 4/1/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL & ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	3181
Purge rate (cc/min):	200	*Purge rate (cc/min):*	150
Purge duration (min):	2	*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	0952
Canister No.:	~~14815~~ R-5 ~~10-1744~~	*Purge finish time:*	1207
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	~~0825~~ 0900	*Sample no.:*	SVP-17-SG-040103
Start vacuum reading (mm Hg):	~~29~~ 31	*Duplicate sample?:*	N
Finish time:	~~0910~~ ~~0945~~ 0950	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	9		
Tracer used?:	Yes		
Duplicate sample?:	N		
Duplicate canister no.:	—		

* Canister lost pressure after 30 min. Replace w/ new canister & collect for 45 min again

Notes (barometric pressure reading and time, modifications to sample train, etc.):

BP = 29.5 PID = 0

Temp = 66°C

Wind from SW

Soil Vapor Sampling Field Form: Probe#_____

Sample No.: SVP-18-040203 **Date:** 4/2/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL & ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	
Purge rate (cc/min):	200	*Purge rate (cc/min):*	
Purge duration (min):	5	*Target purge duration (min)*	
Purge volume (cc):		*Purge start time:*	
Canister No.:	9583	*Purge finish time:*	
Flow restrictor (min):	45	*Actual purge duration (min):*	
Start time:	0901	*Sample no.:*	
Start vacuum reading (mm Hg):	28.5	*Duplicate sample?:*	
Finish time:	0946	*Duplicate sample no.:*	
Finish vacuum reading (mm Hg):	8.0		
Tracer used?:	Yes		
Duplicate sample?:	N		
Duplicate canister no.:	—		

Notes (ambient temperature, barometric pressure reading and time, modifications to sample train, etc.):

BP = 29.55 PID = 0.9

temp = 63° probe depth = 6'

Wind = from south

Soil Vapor Sampling Field Form: Probe# SVP-19

Sample No.: SVP-19-86-040203 **Date:** 4/2/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL SML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	
Purge rate (cc/min):	200	*Purge rate (cc/min):*	
Purge duration (min):	5	*Target purge duration (min)*	
Purge volume (cc):		*Purge start time:*	
Canister No.:	21211	*Purge finish time:*	
Flow restrictor (min):	45	*Actual purge duration (min):*	
Start time:	1025	*Sample no.:*	
Start vacuum reading (mm Hg):	28.5	*Duplicate sample?:*	
Finish time:	1110	*Duplicate sample no.:*	
Finish vacuum reading (mm Hg):	~~110~~ 8.0		
Tracer used?:	Yes		
Duplicate sample?:	N		
Duplicate canister no.:	—		

Notes (ambient temperature, barometric pressure reading and time, modifications to sample train, etc.):

BP = 29.55 PID = 0

Temp: 68 Probe to 6'

Wind from south

Soil Vapor Sampling Field Form: Probe# SVP-20

Sample No.: SVP-20-SG-040203 **Date:** 4/2/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL ; ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	
Purge rate (cc/min):	200	*Purge rate (cc/min):*	
Purge duration (min):	5	*Target purge duration (min)*	
Purge volume (cc):		*Purge start time:*	
Canister No.:	9916	*Purge finish time:*	
Flow restrictor (min):	45	*Actual purge duration (min):*	
Start time:	1054	*Sample no.:*	
Start vacuum reading (mm Hg):	29.0	*Duplicate sample?:*	
Finish time:	1139	*Duplicate sample no.:*	
Finish vacuum reading (mm Hg):	8.5		
Tracer used?:	Y		
Duplicate sample?:	N		
Duplicate canister no.:	—		

Notes (ambient temperature, barometric pressure reading and time, modifications to sample train, etc.):

BP = 29.55 PID = Ø

Temp = 71 Probe to 6'

Wind from South

Soil Vapor Sampling Field Form: Probe# SVP-21-~~SG~~

Sample No.: SVP-21-SG-040203 **Date:** 4/2/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL & MC

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	
Purge rate (cc/min):	200	*Purge rate (cc/min):*	
Purge duration (min):	5	*Target purge duration (min)*	
Purge volume (cc):		*Purge start time:*	
Canister No.:	13658	*Purge finish time:*	
Flow restrictor (min):	45	*Actual purge duration (min):*	
Start time:	1223	*Sample no.:*	
Start vacuum reading (mm Hg):	29.0	*Duplicate sample?:*	
Finish time:	1308	*Duplicate sample no.:*	
Finish vacuum reading (mm Hg):	8.5		
Tracer used?:	YES		
Duplicate sample?:	N		
Duplicate canister no.:	—		

Notes (ambient temperature, barometric pressure reading and time, modifications to sample train, etc.):

Temp = 71°F PID = 0

BP = 29.55 Probe to 6'

Wind from South

Soil Vapor Sampling Field Form: Probe# SVP-22

Sample No.: SVP-22-SG-040203 **Date:** 4/2/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL, ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	3579	*Pump No.:*	
Purge rate (cc/min):	200	*Purge rate (cc/min):*	
Purge duration (min):	5	*Target purge duration (min)*	
Purge volume (cc):		*Purge start time:*	
Canister No.:	33871	*Purge finish time:*	
Flow restrictor (min):	45	*Actual purge duration (min):*	
Start time:	1304	*Sample no.:*	
Start vacuum reading (mm Hg):	28	*Duplicate sample?:*	
Finish time:	1349	*Duplicate sample no.:*	
Finish vacuum reading (mm Hg):	8		
Tracer used?:	YES		
Duplicate sample?:	N		
Duplicate canister no.:	—		

Notes (ambient temperature, barometric pressure reading and time, modifications to sample train, etc.):

BP = 29.55 PID = 0

Temp = 71 Probe to 6'

Wind from SE

Soil Vapor Sampling Field Form: Probe# SVP-23 (AMBIENT AIR)

Sample No.: SVP-23-SG-040203 **Date:** 4/2/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL & ML

Volatile Organic Compound Sampling	
Pump No.	
Purge rate (cc/min):	
Purge duration (min):	
Purge volume (cc):	
Canister No.:	14889
Flow restrictor (min):	45
Start time:	1218
Start vacuum reading (mm Hg):	29.5
Finish time:	1303
Finish vacuum reading (mm Hg):	9
Tracer used?:	N
Duplicate sample?:	N
Duplicate canister no.:	—

SemiVolatile Organic Compound Sampling	
Pump No.:	
Purge rate (cc/min):	
Target purge duration (min)	
Purge start time:	
Purge finish time:	
Actual purge duration (min):	
Sample no.:	
Duplicate sample?:	
Duplicate sample no.:	

Notes (ambient temperature, barometric pressure reading and time, modifications to sample train, etc.):

Temp = 71°F PID = 0

BP = 29.55

Windfrm S

Soil Vapor Sampling Field Form

Vapor Probe No.: 033103 BACKGROUND SAMPLE **Date:** 3/31/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL & ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.	—	*Pump No.:*	8850
Purge rate (cc/min):	—	*Purge rate (cc/min):*	150
Purge duration (min):	—	*Target purge duration (min)*	135
Purge volume (cc):	—	*Purge start time:*	1552
Canister No.:	9947	*Purge finish time:*	1807
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	1502	*Sample no.:*	Background Sample 033103
Start vacuum reading (mm Hg):	28	*Duplicate sample?:*	—
Finish time:	1547	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	7.5		
Tracer used?:	Yes		
Duplicate sample?:	—		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

Temp = 60°F PID = 0

BP = 29.65

Wind fm S

Soil Vapor Sampling Field Form

Vapor Probe No.: Background Air Sample 040103-AM **Date:** 9/1/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers: KL & ML

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.		*Pump No.:*	8850
Purge rate (cc/min):		*Purge rate (cc/min):*	150
Purge duration (min):		*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	0909
Canister No.:	425	*Purge finish time:*	1124
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	0823	*Sample no.:*	Background Air Sample 040103-AM
Start vacuum reading (mm Hg):	28.5	*Duplicate sample?:*	—
Finish time:	0908	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	8.0		
Tracer used?:	N		
Duplicate sample?:	—		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

BP = 29.5 PID = 0

temp = 66° F

Wind = from SW

Soil Vapor Sampling Field Form

Vapor Probe No.: 040103-PM Background air sample **Date:** 4/1/03

Client: Solutia, Inc. **Site Location:** W.G. Krummrich Plant Sauget, IL

Samplers:

Volatile Organic Compound Sampling		SemiVolatile Organic Compound Sampling	
Pump No.		*Pump No.:*	3181
Purge rate (cc/min):		*Purge rate (cc/min):*	150
Purge duration (min):		*Target purge duration (min)*	135
Purge volume (cc):		*Purge start time:*	1246
Canister No.:	31151	*Purge finish time:*	1501
Flow restrictor (min):	45	*Actual purge duration (min):*	135
Start time:	1242	*Sample no.:*	
Start vacuum reading (mm Hg):	29	*Duplicate sample?:*	N
Finish time:	1327	*Duplicate sample no.:*	—
Finish vacuum reading (mm Hg):	8.5		
Tracer used?:	N		
Duplicate sample?:	N		
Duplicate canister no.:	—		

Notes (barometric pressure reading and time, modifications to sample train, etc.):

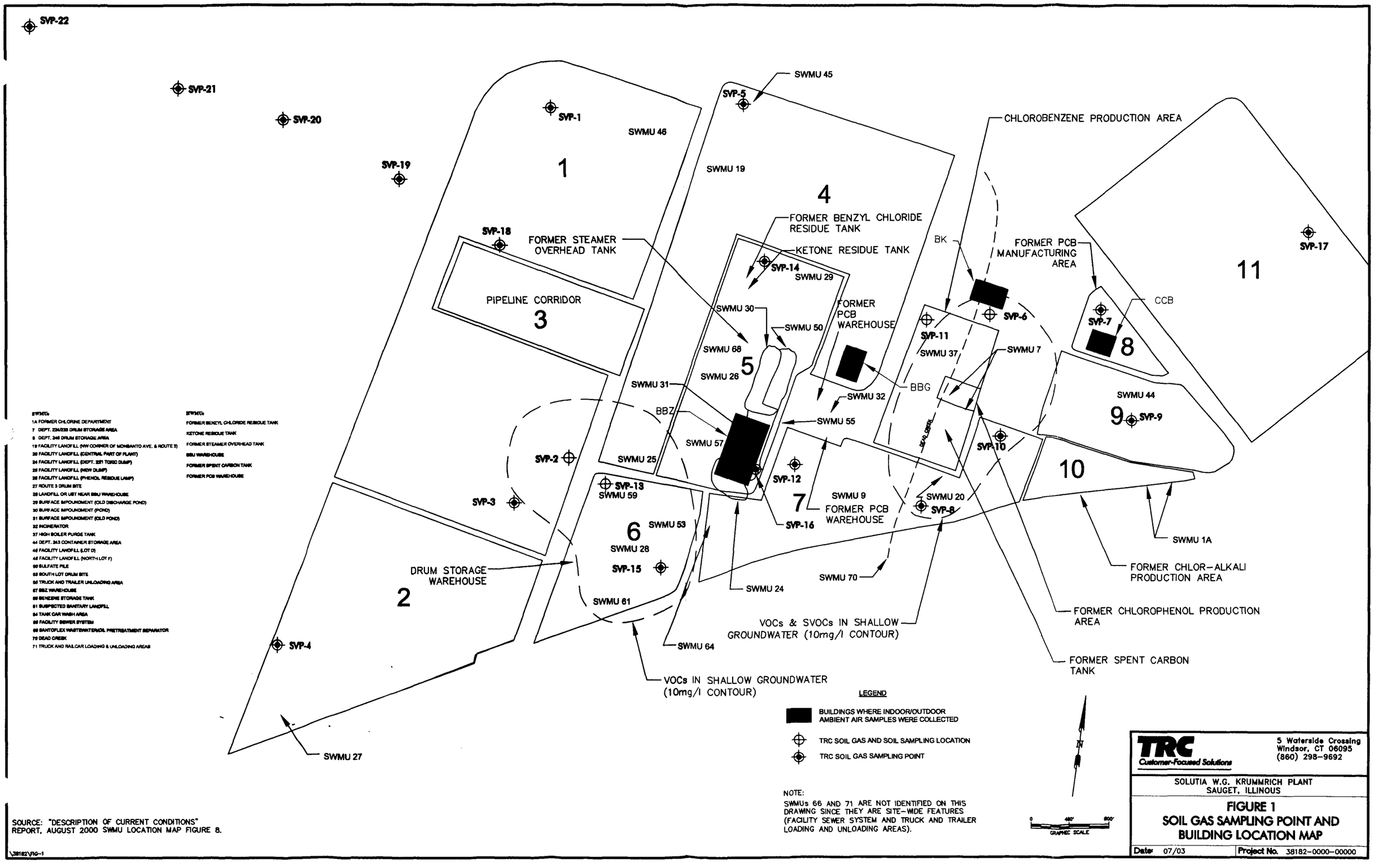
BP = 29.5 PID = 0

temp = 72

Wind = from S

Attachment B

Soil Gas Sampling Point and Building Location Map



SOURCE: "DESCRIPTION OF CURRENT CONDITIONS" REPORT, AUGUST 2000 SWMU LOCATION MAP FIGURE 8.

\38182\FIG-1

TRC
Customer-Focused Solutions
5 Waterside Crossing
Windsor, CT 06095
(860) 298-9692

SOLUTIA W.G. KRUMMRICH PLANT
SAUGET, ILLINOUS

FIGURE 1
SOIL GAS SAMPLING POINT AND BUILDING LOCATION MAP

Date: 07/03 | Project No. 38182-0000-00000

Attachment C

Laboratory Reports

TO-15

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific
E-mail to:samplereceiving@airtoxics.com

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0304090

Work Order Summary

CLIENT:	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095	**BILL TO:**	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095
PHONE:	860-298-6300	**P.O. #**	
FAX:		**PROJECT #**	38182 Solutia/Sauget
DATE RECEIVED:	4/3/03	**CONTACT:**	Betty Chu
DATE COMPLETED:	4/15/03		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	SVP-18-SG-040203	Modified TO-15/TIC	9.5 "Hg
02A	SVP-19-SG-040203	Modified TO-15/TIC	9.0 "Hg
03A	SVP-20-SG-040203	Modified TO-15/TIC	9.5 "Hg
04A	SVP-21-SG-040203	Modified TO-15/TIC	9.5 "Hg
05A	SVP-22-SG-040203	Modified TO-15/TIC	9.0 "Hg
06A	SVP-23-SG-040203	Modified TO-15/TIC	9.5 "Hg
06AA	SVP-23-SG-040203 Duplicate	Modified TO-15/TIC	9.5 "Hg
07A	Lab Blank	Modified TO-15/TIC	NA
08A	CCV	Modified TO-15/TIC	NA
09A	LCS	Modified TO-15/TIC	NA

CERTIFIED BY: Linda J. Fruman DATE: 04/15/03

Laboratory Director

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/02, Expiration date: 06/30/03
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
TRC Environmental Corporation
Workorder# 0304090

Six 6 Liter Summa Canister samples were received on April 03, 2003. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-15*	*ATL Modifications*
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limt
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
IS recoveries	Within 40% of mean over ICAL for blanks, and w/in 40% of daily CCV for samples.	Within 40% of CCV recoveries for blank and samples.
Daily CCV	30% Difference	30% Difference with two allowed out up to 40%.
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one individual analytical file due to the client's request for non-standard compounds.

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

By specific client request, Tetrafluoroethane was reported as a tentatively identified compound (TIC) to assist in evaluation of the client sampling system.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated Peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

SAMPLE NAME: SVP-18-SG-040203

ID#: 0304090-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040324**	**Date of Collection:**	**4/2/03**
Dil. Factor:	**1.96**	**Date of Analysis:**	**4/4/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.98	2.5	Not Detected	Not Detected
Methylene Chloride	0.98	3.5	Not Detected	Not Detected
1,1-Dichloroethane	0.98	4.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.98	3.9	Not Detected	Not Detected
Chloroform	0.98	4.9	Not Detected	Not Detected
1,1,1-Trichloroethane	0.98	5.4	Not Detected	Not Detected
Benzene	0.98	3.2	Not Detected	Not Detected
1,2-Dichloroethane	0.98	4.0	Not Detected	Not Detected
Trichloroethene	0.98	5.4	Not Detected	Not Detected
Tetrachloroethene	0.98	6.8	Not Detected	Not Detected
Chlorobenzene	0.98	4.6	Not Detected	Not Detected
alpha-Chlorotoluene	0.98	5.2	Not Detected	Not Detected
Acetone	3.9	9.5	6.3	15
Carbon Disulfide	3.9	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.9	16	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.9	12	8.4	25
Bromodichloromethane	3.9	27	Not Detected	Not Detected
4-Methyl-2-pentanone	3.9	16	Not Detected	Not Detected
Bromoform	3.9	41	Not Detected	Not Detected
tert-Butylbenzene	3.9	22	Not Detected	Not Detected
Naphthalene	20	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	*CAS Number*	*Match Quality*	Amount ppbv
Tetrafluoroethane	BLNK01	NA	9.6

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	93	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-19-SG-040203

ID#: 0304090-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040325**	**Date of Collection:**	**4/2/03**
Dil. Factor:	**1.91**	**Date of Analysis:**	**4/4/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.96	2.5	Not Detected	Not Detected
Methylene Chloride	0.96	3.4	Not Detected	Not Detected
1,1-Dichloroethane	0.96	3.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.96	3.8	Not Detected	Not Detected
Chloroform	0.96	4.7	Not Detected	Not Detected
1,1,1-Trichloroethane	0.96	5.3	Not Detected	Not Detected
Benzene	0.96	3.1	Not Detected	Not Detected
1,2-Dichloroethane	0.96	3.9	Not Detected	Not Detected
Trichloroethene	0.96	5.2	Not Detected	Not Detected
Tetrachloroethene	0.96	6.6	Not Detected	Not Detected
Chlorobenzene	0.96	4.5	Not Detected	Not Detected
alpha-Chlorotoluene	0.96	5.0	Not Detected	Not Detected
Acetone	3.8	9.2	5.6	13
Carbon Disulfide	3.8	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.8	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.8	11	11	33
Bromodichloromethane	3.8	26	Not Detected	Not Detected
4-Methyl-2-pentanone	3.8	16	Not Detected	Not Detected
Bromoform	3.8	40	Not Detected	Not Detected
tert-Butylbenzene	3.8	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-20-SG-040203

ID#: 0304090-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040326**	**Date of Collection:**	**4/2/03**
Dil. Factor:	**1.96**	**Date of Analysis:**	**4/4/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.98	2.5	Not Detected	Not Detected
Methylene Chloride	0.98	3.5	Not Detected	Not Detected
1,1-Dichloroethane	0.98	4.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.98	3.9	Not Detected	Not Detected
Chloroform	0.98	4.9	Not Detected	Not Detected
1,1,1-Trichloroethane	0.98	5.4	Not Detected	Not Detected
Benzene	0.98	3.2	Not Detected	Not Detected
1,2-Dichloroethane	0.98	4.0	Not Detected	Not Detected
Trichloroethene	0.98	5.4	Not Detected	Not Detected
Tetrachloroethene	0.98	6.8	Not Detected	Not Detected
Chlorobenzene	0.98	4.6	Not Detected	Not Detected
alpha-Chlorotoluene	0.98	5.2	Not Detected	Not Detected
Acetone	3.9	9.5	4.2	10
Carbon Disulfide	3.9	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.9	16	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.9	12	5.5	16
Bromodichloromethane	3.9	27	Not Detected	Not Detected
4-Methyl-2-pentanone	3.9	16	Not Detected	Not Detected
Bromoform	3.9	41	Not Detected	Not Detected
tert-Butylbenzene	3.9	22	Not Detected	Not Detected
Naphthalene	20	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	93	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-21-SG-040203

ID#: 0304090-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040327**	**Date of Collection:**	**4/2/03**
Dil. Factor:	**1.96**	**Date of Analysis:**	**4/4/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.98	2.5	Not Detected	Not Detected
Methylene Chloride	0.98	3.5	Not Detected	Not Detected
1,1-Dichloroethane	0.98	4.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.98	3.9	Not Detected	Not Detected
Chloroform	0.98	4.9	Not Detected	Not Detected
1,1,1-Trichloroethane	0.98	5.4	Not Detected	Not Detected
Benzene	0.98	3.2	Not Detected	Not Detected
1,2-Dichloroethane	0.98	4.0	Not Detected	Not Detected
Trichloroethene	0.98	5.4	Not Detected	Not Detected
Tetrachloroethene	0.98	6.8	Not Detected	Not Detected
Chlorobenzene	0.98	4.6	Not Detected	Not Detected
alpha-Chlorotoluene	0.98	5.2	Not Detected	Not Detected
Acetone	3.9	9.5	12	28
Carbon Disulfide	3.9	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.9	16	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.9	12	Not Detected	Not Detected
Bromodichloromethane	3.9	27	Not Detected	Not Detected
4-Methyl-2-pentanone	3.9	16	Not Detected	Not Detected
Bromoform	3.9	41	Not Detected	Not Detected
tert-Butylbenzene	3.9	22	Not Detected	Not Detected
Naphthalene	20	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	94	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-22-SG-040203

ID#: 0304090-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040328**	**Date of Collection:**	**4/2/03**
Dil. Factor:	**1.91**	**Date of Analysis:**	**4/4/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.96	2.5	Not Detected	Not Detected
Methylene Chloride	0.96	3.4	Not Detected	Not Detected
1,1-Dichloroethane	0.96	3.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.96	3.8	Not Detected	Not Detected
Chloroform	0.96	4.7	Not Detected	Not Detected
1,1,1-Trichloroethane	0.96	5.3	Not Detected	Not Detected
Benzene	0.96	3.1	Not Detected	Not Detected
1,2-Dichloroethane	0.96	3.9	Not Detected	Not Detected
Trichloroethene	0.96	5.2	Not Detected	Not Detected
Tetrachloroethene	0.96	6.6	Not Detected	Not Detected
Chlorobenzene	0.96	4.5	Not Detected	Not Detected
alpha-Chlorotoluene	0.96	5.0	Not Detected	Not Detected
Acetone	3.8	9.2	9.0	22
Carbon Disulfide	3.8	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.8	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.8	11	8.0	24
Bromodichloromethane	3.8	26	Not Detected	Not Detected
4-Methyl-2-pentanone	3.8	16	Not Detected	Not Detected
Bromoform	3.8	40	Not Detected	Not Detected
tert-Butylbenzene	3.8	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-23-SG-040203

ID#: 0304090-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040329**	**Date of Collection: 4/2/03**	
Dil. Factor:	**1.96**	**Date of Analysis: 4/4/03**	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.98	2.5	Not Detected	Not Detected
Methylene Chloride	0.98	3.5	7.6	27
1,1-Dichloroethane	0.98	4.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.98	3.9	Not Detected	Not Detected
Chloroform	0.98	4.9	Not Detected	Not Detected
1,1,1-Trichloroethane	0.98	5.4	Not Detected	Not Detected
Benzene	0.98	3.2	Not Detected	Not Detected
1,2-Dichloroethane	0.98	4.0	Not Detected	Not Detected
Trichloroethene	0.98	5.4	Not Detected	Not Detected
Tetrachloroethene	0.98	6.8	Not Detected	Not Detected
Chlorobenzene	0.98	4.6	Not Detected	Not Detected
alpha-Chlorotoluene	0.98	5.2	Not Detected	Not Detected
Acetone	3.9	9.5	19	46
Carbon Disulfide	3.9	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.9	16	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.9	12	Not Detected	Not Detected
Bromodichloromethane	3.9	27	Not Detected	Not Detected
4-Methyl-2-pentanone	3.9	16	Not Detected	Not Detected
Bromoform	3.9	41	Not Detected	Not Detected
tert-Butylbenzene	3.9	22	Not Detected	Not Detected
Naphthalene	20	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	10

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	93	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-23-SG-040203 Duplicate

ID#: 0304090-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040430**	**Date of Collection:**	**4/2/03**
Dil. Factor:	**1.96**	**Date of Analysis:**	**4/4/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.98	2.5	Not Detected	Not Detected
Methylene Chloride	0.98	3.5	7.3	26
1,1-Dichloroethane	0.98	4.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.98	3.9	Not Detected	Not Detected
Chloroform	0.98	4.9	Not Detected	Not Detected
1,1,1-Trichloroethane	0.98	5.4	Not Detected	Not Detected
Benzene	0.98	3.2	Not Detected	Not Detected
1,2-Dichloroethane	0.98	4.0	Not Detected	Not Detected
Trichloroethene	0.98	5.4	Not Detected	Not Detected
Tetrachloroethene	0.98	6.8	Not Detected	Not Detected
Chlorobenzene	0.98	4.6	Not Detected	Not Detected
alpha-Chlorotoluene	0.98	5.2	Not Detected	Not Detected
Acetone	3.9	9.5	18	44
Carbon Disulfide	3.9	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.9	16	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.9	12	Not Detected	Not Detected
Bromodichloromethane	3.9	27	Not Detected	Not Detected
4-Methyl-2-pentanone	3.9	16	Not Detected	Not Detected
Bromoform	3.9	41	Not Detected	Not Detected
tert-Butylbenzene	3.9	22	Not Detected	Not Detected
Naphthalene	20	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	8.5

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0304090-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d040307	**Date of Collection:**	NA
Dil. Factor:	1.00	**Date of Analysis:**	4/3/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
tert-Butylbenzene	2.0	11	Not Detected	Not Detected
Naphthalene	10	53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0304090-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040302**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/3/03**	

Compound	%Recovery
Vinyl Chloride	87
Methylene Chloride	84
1,1-Dichloroethane	88
cis-1,2-Dichloroethene	88
Chloroform	88
1,1,1-Trichloroethane	91
Benzene	88
1,2-Dichloroethane	88
Trichloroethene	88
Tetrachloroethene	92
Chlorobenzene	90
alpha-Chlorotoluene	85
Acetone	94
Carbon Disulfide	89
trans-1,2-Dichloroethene	89
2-Butanone (Methyl Ethyl Ketone)	92
Bromodichloromethane	96
4-Methyl-2-pentanone	96
Bromoform	99
tert-Butylbenzene	108
Naphthalene	91
1,2-Dichlorobenzene	85
1,4-Dichlorobenzene	87

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0304090-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040303**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/3/03**	

Compound	%Recovery
Vinyl Chloride	90
Methylene Chloride	80
1,1-Dichloroethane	75
cis-1,2-Dichloroethene	85
Chloroform	82
1,1,1-Trichloroethane	83
Benzene	90
1,2-Dichloroethane	86
Trichloroethene	89
Tetrachloroethene	90
Chlorobenzene	86
alpha-Chlorotoluene	95
Acetone	88
Carbon Disulfide	86
trans-1,2-Dichloroethene	91
2-Butanone (Methyl Ethyl Ketone)	86
Bromodichloromethane	84
4-Methyl-2-pentanone	87
Bromoform	82
tert-Butylbenzene	Not Spiked
Naphthalene	Not Spiked
1,2-Dichlorobenzene	83
1,4-Dichlorobenzene	81

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Spiked

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

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Contact Person MIKE SUSCA
Company TRC Environmental
Address 5 Waterside Crossing City Windsor State CT Zip 06095
Phone (860) 298-6234 FAX (860) 298-6399
Collected By: Signature [signature]

Project info:
P.O. #
Project # 38182
Project Name Solutia/Sunset

Turn Around Time:
☐ Normal
☒ Rush See notes
Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A ~~04A~~	SVP-18-SG-040203	4/2/03 – 0946	TO-15 Reference analyte list previously submitted	28.5	8.0	9.5 "Hg
02A ~~05A~~	SVP-19-SG-040203	4/2/03 – 1110	TO-15 " "	28.5	8.0	9.0 "Hg
03A ~~06A~~	SVP-20-SG-040203	4/2/03 – 1139	TO-15 " "	29.0	8.5	9.5 "Hg
04A ~~07A~~	SVP-21-SG-040203	4/2/03 – 1308	TO-15 " "	29.0	8.5	9.5 "Hg
TB 4/3/03						

Relinquished By: (Signature) Date/Time [signature] 4/2/03 1430
Received by: (Signature) Date/Time
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time [signature] AT 4/3/03 935

Notes:
48 hr TAT on analyses
Standard TAT on report (include complete data validation package)

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	8369 8665 1787	TB	—	Good	(Yes) No None	0304090

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

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Contact Person Mike Susca
Company TRC Environmental
Address 5 Waterside Crossing City Windsor State CT Zip 06095
Phone (860) 298-6234 FAX (860) 298-6399
Collected By: Signature Katie Launer

Project info:
P.O. #
Project # 38182
Project Name Solutia/Saugets

Turn Around Time:
☐ Normal
☒ Rush see notes
Specify

	Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
05A	~~08A~~	SVP-22-SG-040203	4/2/03 - 1349	TO-15 - refer to analyte list previously submitted	28.0	8.0	9.0
06A	~~09A~~	SVP-23-SG-040203	4/2/03 - 1303	TO-15 - " "	29.5	9.0	9.5
	TG 4/3/03						

GS 4-3-3

Relinquished By: (Signature) Date/Time Katie Launer 4/2/03 1435
Received By: (Signature) Date/Time Jamel Thomas ATL 4/3/03 920
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time

Notes:
48hr TAT on analysis
Standard TAT on report
(include data validation package)

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	9369 8665 1787	[initials]	—	Good	(Yes) No None	0304090

Form 1293 rev. 09

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

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Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific
E-mail to:samplereceiving@airtoxics.com

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0304034

Work Order Summary

CLIENT:	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095	**BILL TO:**	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095
PHONE:	860-298-6300	**P.O. #**	
FAX:		**PROJECT #**	38182 Solutia/Sauget
DATE RECEIVED:	4/2/03	**CONTACT:**	Betty Chu
DATE COMPLETED:	4/15/03		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	SVP-5-SG-040103	Modified TO-15/TIC	8.5 "Hg
02A	SVP-14-SG-040103	Modified TO-15/TIC	9.5 "Hg
03A	SVP-17-SG-040103	Modified TO-15/TIC	7.5 "Hg
04A	SVP-140-SG-040103	Modified TO-15/TIC	9.0 "Hg
05A	SVP-1-SG-040103	Modified TO-15/TIC	9.5 "Hg
06A	SVP-2-SG-040103	Modified TO-15/TIC	9.5 "Hg
07A	SVP-3-SG-040103	Modified TO-15/TIC	9.0 "Hg
08A	SVP-4-SG-040103	Modified TO-15/TIC	9.0 "Hg
08AA	SVP-4-SG-040103 Duplicate	Modified TO-15/TIC	9.0 "Hg
09A	Background Air Sample-040103-AM	Modified TO-15/TIC	9.0 "Hg
10A	Background Air Sample-040103-PM	Modified TO-15/TIC	7.0 "Hg
11A	Trip Blank 040103	Modified TO-15/TIC	29.0 "Hg
12A	Lab Blank	Modified TO-15/TIC	NA
12B	Lab Blank	Modified TO-15/TIC	NA
12C	Lab Blank	Modified TO-15/TIC	NA
13A	CCV	Modified TO-15/TIC	NA
13B	CCV	Modified TO-15/TIC	NA
13C	CCV	Modified TO-15/TIC	NA
14A	LCS	Modified TO-15/TIC	NA
14B	LCS	Modified TO-15/TIC	NA

Continued on next page

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WORK ORDER #: 0304034

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PHONE:	860-298-6300	**P.O. #**	
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DATE RECEIVED:	4/2/03	**CONTACT:**	Betty Chu
DATE COMPLETED:	4/15/03		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
14C	LCS	Modified TO-15/TIC	NA

CERTIFIED BY: Linda A. Frumarx DATE: 04/15/03

Laboratory Director

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/02, Expiration date: 06/30/03
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
Modified TO-15
TRC Environmental Corporation
Workorder# 0304034

Eleven 6 Liter Summa Canister samples were received on April 02, 2003. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-15*	*ATL Modifications*
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limt
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
IS recoveries	Within 40% of mean over ICAL for blanks, and w/in 40% of daily CCV for samples.	Within 40% of CCV recoveries for blank and samples.
Daily CCV	30% Difference	30% Difference with two allowed out up to 40%.
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106

Receiving Notes

The chain of custody information for sample SVP-2-SG-040103 did not match the entry on the sample tag. The discrepancy was noted in the Login email and the information on the chain of custody was used to process and report the sample.

Analytical Notes

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

The following compound, alpha-Chlorotoluene, indicated low bias (less than 70% expected recovery) in the daily CCV analyzed on MSD-B on 04/02/03. Associated non-detects in samples SVP-14-SG-040103, SVP-140-SG-040103, Background Air Sample-040103-AM, Background Air Sample-040103-PM and Trip Blank 040103 were flagged to indicate estimated results with low bias.

The reported CCV for each daily batch may be derived from more than one individual analytical file due to the client's request for non-standard compounds.

By specific client request, Tetrafluoroethane was reported as a tentatively identified compound (TIC) to assist in evaluation of the client sampling system.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated Peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

SAMPLE NAME: SVP-5-SG-040103

ID#: 0304034-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d040217	Date of Collection:	4/1/03
Dil. Factor:	1.87	Date of Analysis:	4/2/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.94	2.4	Not Detected	Not Detected
Methylene Chloride	0.94	3.3	Not Detected	Not Detected
1,1-Dichloroethane	0.94	3.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.94	3.8	Not Detected	Not Detected
Chloroform	0.94	4.6	Not Detected	Not Detected
1,1,1-Trichloroethane	0.94	5.2	Not Detected	Not Detected
Benzene	0.94	3.0	Not Detected	Not Detected
1,2-Dichloroethane	0.94	3.8	Not Detected	Not Detected
Trichloroethene	0.94	5.1	Not Detected	Not Detected
Tetrachloroethene	0.94	6.4	Not Detected	Not Detected
Chlorobenzene	0.94	4.4	Not Detected	Not Detected
alpha-Chlorotoluene	0.94	4.9	Not Detected	Not Detected
Acetone	3.7	9.0	Not Detected	Not Detected
Carbon Disulfide	3.7	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.7	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.7	11	Not Detected	Not Detected
Bromodichloromethane	3.7	25	Not Detected	Not Detected
4-Methyl-2-pentanone	3.7	16	Not Detected	Not Detected
Bromoform	3.7	39	Not Detected	Not Detected
tert-Butylbenzene	3.7	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.94	5.7	Not Detected	Not Detected
1,4-Dichlorobenzene	0.94	5.7	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-14-SG-040103

ID#: 0304034-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040224**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**784**	**Date of Analysis:**	**4/3/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	390	1000	Not Detected	Not Detected
Methylene Chloride	390	1400	Not Detected	Not Detected
1,1-Dichloroethane	390	1600	Not Detected	Not Detected
cis-1,2-Dichloroethene	390	1600	Not Detected	Not Detected
Chloroform	390	1900	Not Detected	Not Detected
1,1,1-Trichloroethane	390	2200	Not Detected	Not Detected
Benzene	390	1300	1100	3700
1,2-Dichloroethane	390	1600	Not Detected	Not Detected
Trichloroethene	390	2100	Not Detected	Not Detected
Tetrachloroethene	390	2700	Not Detected	Not Detected
Chlorobenzene	390	1800	2200	10000
alpha-Chlorotoluene	390	2100	Not Detected U J	Not Detected U J
Acetone	1600	3800	Not Detected	Not Detected
Carbon Disulfide	1600	5000	Not Detected	Not Detected
trans-1,2-Dichloroethene	1600	6300	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1600	4700	Not Detected	Not Detected
Bromodichloromethane	1600	11000	Not Detected	Not Detected
4-Methyl-2-pentanone	1600	6500	72000	300000
Bromoform	1600	16000	Not Detected	Not Detected
tert-Butylbenzene	1600	8700	Not Detected	Not Detected
Naphthalene	7800	42000	Not Detected	Not Detected
1,2-Dichlorobenzene	390	2400	Not Detected	Not Detected
1,4-Dichlorobenzene	390	2400	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	85	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-17-SG-040103

ID#: 0304034-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040322**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.79**	**Date of Analysis:**	**4/3/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.90	2.3	Not Detected	Not Detected
Methylene Chloride	0.90	3.2	Not Detected	Not Detected
1,1-Dichloroethane	0.90	3.7	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.90	3.6	Not Detected	Not Detected
Chloroform	0.90	4.4	Not Detected	Not Detected
1,1,1-Trichloroethane	0.90	5.0	Not Detected	Not Detected
Benzene	0.90	2.9	3.5	11
1,2-Dichloroethane	0.90	3.7	Not Detected	Not Detected
Trichloroethene	0.90	4.9	Not Detected	Not Detected
Tetrachloroethene	0.90	6.2	Not Detected	Not Detected
Chlorobenzene	0.90	4.2	Not Detected	Not Detected
alpha-Chlorotoluene	0.90	4.7	Not Detected	Not Detected
Acetone	3.6	8.6	11	26
Carbon Disulfide	3.6	11	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.6	14	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.6	11	Not Detected	Not Detected
Bromodichloromethane	3.6	24	Not Detected	Not Detected
4-Methyl-2-pentanone	3.6	15	Not Detected	Not Detected
Bromoform	3.6	38	Not Detected	Not Detected
tert-Butylbenzene	3.6	20	Not Detected	Not Detected
Naphthalene	18	95	Not Detected	Not Detected
1,2-Dichlorobenzene	0.90	5.5	Not Detected	Not Detected
1,4-Dichlorobenzene	0.90	5.5	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	150

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	94	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-140-SG-040103

ID#: 0304034-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040225**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**764**	**Date of Analysis:**	**4/3/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	380	990	Not Detected	Not Detected
Methylene Chloride	380	1300	Not Detected	Not Detected
1,1-Dichloroethane	380	1600	Not Detected	Not Detected
cis-1,2-Dichloroethene	380	1500	Not Detected	Not Detected
Chloroform	380	1900	Not Detected	Not Detected
1,1,1-Trichloroethane	380	2100	Not Detected	Not Detected
Benzene	380	1200	1100	3700
1,2-Dichloroethane	380	1600	Not Detected	Not Detected
Trichloroethene	380	2100	Not Detected	Not Detected
Tetrachloroethene	380	2600	Not Detected	Not Detected
Chlorobenzene	380	1800	2300	11000
alpha-Chlorotoluene	380	2000	Not Detected U J	Not Detected U J
Acetone	1500	3700	Not Detected	Not Detected
Carbon Disulfide	1500	4800	Not Detected	Not Detected
trans-1,2-Dichloroethene	1500	6200	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1500	4600	Not Detected	Not Detected
Bromodichloromethane	1500	10000	Not Detected	Not Detected
4-Methyl-2-pentanone	1500	6400	75000	310000
Bromoform	1500	16000	Not Detected	Not Detected
tert-Butylbenzene	1500	8500	Not Detected	Not Detected
Naphthalene	7600	41000	Not Detected	Not Detected
1,2-Dichlorobenzene	380	2300	Not Detected	Not Detected
1,4-Dichlorobenzene	380	2300	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	86	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-1-SG-040103

ID#: 0304034-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040323**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.96**	**Date of Analysis:**	**4/3/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.98	2.5	Not Detected	Not Detected
Methylene Chloride	0.98	3.5	Not Detected	Not Detected
1,1-Dichloroethane	0.98	4.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.98	3.9	Not Detected	Not Detected
Chloroform	0.98	4.9	Not Detected	Not Detected
1,1,1-Trichloroethane	0.98	5.4	Not Detected	Not Detected
Benzene	0.98	3.2	Not Detected	Not Detected
1,2-Dichloroethane	0.98	4.0	Not Detected	Not Detected
Trichloroethene	0.98	5.4	Not Detected	Not Detected
Tetrachloroethene	0.98	6.8	Not Detected	Not Detected
Chlorobenzene	0.98	4.6	Not Detected	Not Detected
alpha-Chlorotoluene	0.98	5.2	Not Detected	Not Detected
Acetone	3.9	9.5	7.6	18
Carbon Disulfide	3.9	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.9	16	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.9	12	Not Detected	Not Detected
Bromodichloromethane	3.9	27	Not Detected	Not Detected
4-Methyl-2-pentanone	3.9	16	Not Detected	Not Detected
Bromoform	3.9	41	Not Detected	Not Detected
tert-Butylbenzene	3.9	22	Not Detected	Not Detected
Naphthalene	20	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	94	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-2-SG-040103

ID#: 0304034-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d040220	Date of Collection:	4/1/03
Dil. Factor:	1.96	Date of Analysis:	4/2/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.98	2.5	Not Detected	Not Detected
Methylene Chloride	0.98	3.5	Not Detected	Not Detected
1,1-Dichloroethane	0.98	4.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.98	3.9	Not Detected	Not Detected
Chloroform	0.98	4.9	Not Detected	Not Detected
1,1,1-Trichloroethane	0.98	5.4	Not Detected	Not Detected
Benzene	0.98	3.2	1.0	3.3
1,2-Dichloroethane	0.98	4.0	Not Detected	Not Detected
Trichloroethene	0.98	5.4	Not Detected	Not Detected
Tetrachloroethene	0.98	6.8	Not Detected	Not Detected
Chlorobenzene	0.98	4.6	Not Detected	Not Detected
alpha-Chlorotoluene	0.98	5.2	Not Detected	Not Detected
Acetone	3.9	9.5	Not Detected	Not Detected
Carbon Disulfide	3.9	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.9	16	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.9	12	Not Detected	Not Detected
Bromodichloromethane	3.9	27	Not Detected	Not Detected
4-Methyl-2-pentanone	3.9	16	Not Detected	Not Detected
Bromoform	3.9	41	Not Detected	Not Detected
tert-Butylbenzene	3.9	22	Not Detected	Not Detected
Naphthalene	20	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.98	6.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-3-SG-040103

ID#: 0304034-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040221**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.91**	**Date of Analysis:**	**4/2/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.96	2.5	Not Detected	Not Detected
Methylene Chloride	0.96	3.4	Not Detected	Not Detected
1,1-Dichloroethane	0.96	3.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.96	3.8	Not Detected	Not Detected
Chloroform	0.96	4.7	Not Detected	Not Detected
1,1,1-Trichloroethane	0.96	5.3	Not Detected	Not Detected
Benzene	0.96	3.1	Not Detected	Not Detected
1,2-Dichloroethane	0.96	3.9	Not Detected	Not Detected
Trichloroethene	0.96	5.2	Not Detected	Not Detected
Tetrachloroethene	0.96	6.6	1.9	13
Chlorobenzene	0.96	4.5	Not Detected	Not Detected
alpha-Chlorotoluene	0.96	5.0	Not Detected	Not Detected
Acetone	3.8	9.2	Not Detected	Not Detected
Carbon Disulfide	3.8	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.8	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.8	11	Not Detected	Not Detected
Bromodichloromethane	3.8	26	Not Detected	Not Detected
4-Methyl-2-pentanone	3.8	16	Not Detected	Not Detected
Bromoform	3.8	40	Not Detected	Not Detected
tert-Butylbenzene	3.8	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	2100

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	93	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-4-SG-040103

ID#: 0304034-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040222**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.91**	**Date of Analysis:**	**4/2/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.96	2.5	Not Detected	Not Detected
Methylene Chloride	0.96	3.4	Not Detected	Not Detected
1,1-Dichloroethane	0.96	3.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.96	3.8	Not Detected	Not Detected
Chloroform	0.96	4.7	Not Detected	Not Detected
1,1,1-Trichloroethane	0.96	5.3	Not Detected	Not Detected
Benzene	0.96	3.1	Not Detected	Not Detected
1,2-Dichloroethane	0.96	3.9	Not Detected	Not Detected
Trichloroethene	0.96	5.2	Not Detected	Not Detected
Tetrachloroethene	0.96	6.6	Not Detected	Not Detected
Chlorobenzene	0.96	4.5	Not Detected	Not Detected
alpha-Chlorotoluene	0.96	5.0	Not Detected	Not Detected
Acetone	3.8	9.2	Not Detected	Not Detected
Carbon Disulfide	3.8	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.8	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.8	11	Not Detected	Not Detected
Bromodichloromethane	3.8	26	Not Detected	Not Detected
4-Methyl-2-pentanone	3.8	16	Not Detected	Not Detected
Bromoform	3.8	40	Not Detected	Not Detected
tert-Butylbenzene	3.8	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	91	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-4-SG-040103 Duplicate

ID#: 0304034-08AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040223**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.91**	**Date of Analysis:**	**4/3/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.96	2.5	Not Detected	Not Detected
Methylene Chloride	0.96	3.4	Not Detected	Not Detected
1,1-Dichloroethane	0.96	3.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.96	3.8	Not Detected	Not Detected
Chloroform	0.96	4.7	Not Detected	Not Detected
1,1,1-Trichloroethane	0.96	5.3	Not Detected	Not Detected
Benzene	0.96	3.1	Not Detected	Not Detected
1,2-Dichloroethane	0.96	3.9	Not Detected	Not Detected
Trichloroethene	0.96	5.2	Not Detected	Not Detected
Tetrachloroethene	0.96	6.6	Not Detected	Not Detected
Chlorobenzene	0.96	4.5	Not Detected	Not Detected
alpha-Chlorotoluene	0.96	5.0	Not Detected	Not Detected
Acetone	3.8	9.2	Not Detected	Not Detected
Carbon Disulfide	3.8	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.8	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.8	11	Not Detected	Not Detected
Bromodichloromethane	3.8	26	Not Detected	Not Detected
4-Methyl-2-pentanone	3.8	16	Not Detected	Not Detected
Bromoform	3.8	40	Not Detected	Not Detected
tert-Butylbenzene	3.8	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	91	70-130

AIR TOXICS LTD.

SAMPLE NAME: Background Air Sample-040103-AM

ID#: 0304034-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040218**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.91**	**Date of Analysis:**	**4/2/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.96	2.5	Not Detected	Not Detected
Methylene Chloride	0.96	3.4	Not Detected	Not Detected
1,1-Dichloroethane	0.96	3.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.96	3.8	Not Detected	Not Detected
Chloroform	0.96	4.7	Not Detected	Not Detected
1,1,1-Trichloroethane	0.96	5.3	Not Detected	Not Detected
Benzene	0.96	3.1	Not Detected	Not Detected
1,2-Dichloroethane	0.96	3.9	Not Detected	Not Detected
Trichloroethene	0.96	5.2	Not Detected	Not Detected
Tetrachloroethene	0.96	6.6	Not Detected	Not Detected
Chlorobenzene	0.96	4.5	2.6	12
alpha-Chlorotoluene	0.96	5.0	Not Detected U J	Not Detected U J
Acetone	3.8	9.2	4.7	11
Carbon Disulfide	3.8	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.8	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.8	11	Not Detected	Not Detected
Bromodichloromethane	3.8	26	Not Detected	Not Detected
4-Methyl-2-pentanone	3.8	16	Not Detected	Not Detected
Bromoform	3.8	40	Not Detected	Not Detected
tert-Butylbenzene	3.8	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.96	5.8	1.5	8.9

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	84	70-130

AIR TOXICS LTD.

SAMPLE NAME: Background Air Sample-040103-PM

ID#: 0304034-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	b040219	Date of Collection:	4/1/03
Dil. Factor:	1.75	Date of Analysis:	4/3/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.88	2.3	Not Detected	Not Detected
Methylene Chloride	0.88	3.1	Not Detected	Not Detected
1,1-Dichloroethane	0.88	3.6	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.88	3.5	Not Detected	Not Detected
Chloroform	0.88	4.3	Not Detected	Not Detected
1,1,1-Trichloroethane	0.88	4.8	Not Detected	Not Detected
Benzene	0.88	2.8	Not Detected	Not Detected
1,2-Dichloroethane	0.88	3.6	Not Detected	Not Detected
Trichloroethene	0.88	4.8	Not Detected	Not Detected
Tetrachloroethene	0.88	6.0	Not Detected	Not Detected
Chlorobenzene	0.88	4.1	Not Detected	Not Detected
alpha-Chlorotoluene	0.88	4.6	Not Detected U J	Not Detected U J
Acetone	3.5	8.4	4.1	10
Carbon Disulfide	3.5	11	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.5	14	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.5	10	Not Detected	Not Detected
Bromodichloromethane	3.5	24	Not Detected	Not Detected
4-Methyl-2-pentanone	3.5	14	Not Detected	Not Detected
Bromoform	3.5	37	Not Detected	Not Detected
tert-Butylbenzene	3.5	20	Not Detected	Not Detected
Naphthalene	18	93	Not Detected	Not Detected
1,2-Dichlorobenzene	0.88	5.3	Not Detected	Not Detected
1,4-Dichlorobenzene	0.88	5.3	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	84	70-130

AIR TOXICS LTD.

SAMPLE NAME: Trip Blank 040103

ID#: 0304034-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	b040220	Date of Collection:	4/1/03
Dil. Factor:	1.00	Date of Analysis:	4/3/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected U J	Not Detected U J
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
tert-Butylbenzene	2.0	11	Not Detected	Not Detected
Naphthalene	10	53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	83	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0304034-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040207**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/2/03**	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
tert-Butylbenzene	2.0	11	Not Detected	Not Detected
Naphthalene	10	53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0304034-12B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	b040210	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 4/2/03	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected U J	Not Detected U J
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
tert-Butylbenzene	2.0	11	Not Detected	Not Detected
Naphthalene	10	53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	84	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0304034-12C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d040307	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	4/3/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
tert-Butylbenzene	2.0	11	Not Detected	Not Detected
Naphthalene	10	53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0304034-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/2/03**	

Compound	%Recovery
Vinyl Chloride	110
Methylene Chloride	111
1,1-Dichloroethane	117
cis-1,2-Dichloroethene	119
Chloroform	114
1,1,1-Trichloroethane	114
Benzene	109
1,2-Dichloroethane	123
Trichloroethene	115
Tetrachloroethene	121
Chlorobenzene	108
alpha-Chlorotoluene	62 Q
Acetone	95
Carbon Disulfide	82
trans-1,2-Dichloroethene	84
2-Butanone (Methyl Ethyl Ketone)	103
Bromodichloromethane	91
4-Methyl-2-pentanone	106
Bromoform	86
tert-Butylbenzene	81
Naphthalene	82
1,2-Dichlorobenzene	73
1,4-Dichlorobenzene	76

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	85	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0304034-13B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/2/03**	

Compound	%Recovery
Vinyl Chloride	82
Methylene Chloride	80
1,1-Dichloroethane	83
cis-1,2-Dichloroethene	83
Chloroform	84
1,1,1-Trichloroethane	86
Benzene	82
1,2-Dichloroethane	80
Trichloroethene	82
Tetrachloroethene	80
Chlorobenzene	82
alpha-Chlorotoluene	94
Acetone	92
Carbon Disulfide	88
trans-1,2-Dichloroethene	86
2-Butanone (Methyl Ethyl Ketone)	90
Bromodichloromethane	93
4-Methyl-2-pentanone	92
Bromoform	97
tert-Butylbenzene	117
Naphthalene	95
1,2-Dichlorobenzene	86
1,4-Dichlorobenzene	90

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	104	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0304034-13C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040302**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/3/03**	

Compound	%Recovery
Vinyl Chloride	87
Methylene Chloride	84
1,1-Dichloroethane	88
cis-1,2-Dichloroethene	88
Chloroform	88
1,1,1-Trichloroethane	91
Benzene	88
1,2-Dichloroethane	88
Trichloroethene	88
Tetrachloroethene	92
Chlorobenzene	90
alpha-Chlorotoluene	85
Acetone	94
Carbon Disulfide	89
trans-1,2-Dichloroethene	89
2-Butanone (Methyl Ethyl Ketone)	92
Bromodichloromethane	96
4-Methyl-2-pentanone	96
Bromoform	99
tert-Butylbenzene	108
Naphthalene	91
1,2-Dichlorobenzene	85
1,4-Dichlorobenzene	87

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0304034-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040206**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/2/03**	

Compound	%Recovery
Vinyl Chloride	120
Methylene Chloride	110
1,1-Dichloroethane	105
cis-1,2-Dichloroethene	119
Chloroform	111
1,1,1-Trichloroethane	110
Benzene	118
1,2-Dichloroethane	127
Trichloroethene	123
Tetrachloroethene	131 Q
Chlorobenzene	110
alpha-Chlorotoluene	76
Acetone	83
Carbon Disulfide	78
trans-1,2-Dichloroethene	84
2-Butanone (Methyl Ethyl Ketone)	91
Bromodichloromethane	80
4-Methyl-2-pentanone	92
Bromoform	64
tert-Butylbenzene	Not Spiked
Naphthalene	Not Spiked
1,2-Dichlorobenzene	71
1,4-Dichlorobenzene	70

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	85	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0304034-14B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/2/03**	

Compound	%Recovery
Vinyl Chloride	94
Methylene Chloride	82
1,1-Dichloroethane	77
cis-1,2-Dichloroethene	88
Chloroform	84
1,1,1-Trichloroethane	87
Benzene	92
1,2-Dichloroethane	86
Trichloroethene	90
Tetrachloroethene	92
Chlorobenzene	88
alpha-Chlorotoluene	99
Acetone	90
Carbon Disulfide	89
trans-1,2-Dichloroethene	94
2-Butanone (Methyl Ethyl Ketone)	89
Bromodichloromethane	86
4-Methyl-2-pentanone	89
Bromoform	84
tert-Butylbenzene	Not Spiked
Naphthalene	Not Spiked
1,2-Dichlorobenzene	84
1,4-Dichlorobenzene	84

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0304034-14C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d040303	**Date of Collection:**	NA
Dil. Factor:	1.00	**Date of Analysis:**	4/3/03

Compound	%Recovery
Vinyl Chloride	90
Methylene Chloride	80
1,1-Dichloroethane	75
cis-1,2-Dichloroethene	85
Chloroform	82
1,1,1-Trichloroethane	83
Benzene	90
1,2-Dichloroethane	86
Trichloroethene	89
Tetrachloroethene	90
Chlorobenzene	86
alpha-Chlorotoluene	95
Acetone	88
Carbon Disulfide	86
trans-1,2-Dichloroethene	91
2-Butanone (Methyl Ethyl Ketone)	86
Bromodichloromethane	84
4-Methyl-2-pentanone	87
Bromoform	82
tert-Butylbenzene	Not Spiked
Naphthalene	Not Spiked
1,2-Dichlorobenzene	83
1,4-Dichlorobenzene	81

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

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CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Mike Sulsa
Company: TRC Environmental
Address: 5 Waterside Crossing City: Windsor State: CT Zip: 06095
Phone: (860) 298-6234 FAX: (860) 298-6399
Collected By: Signature: Kate Launer

Project Info:
P.O. # ~~38182~~
Project # 38182
Project Name: Scantic/Sargent

Turn Around Time:
☐ Normal
☒ Rush See NOTES Specify

ML 4/2/03

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A	SVP-5-SG-040103	4/1/03 ~ 0922	TO-15 - Refer to analysis list previously submitted	28.5	8.5	9.5"Hg
02A	SVP-14-SG-040103	4/1/03 ~ ~~1349~~ 0916	TO-15 - " "	29	8.5	9.5"Hg
03A	SVP-17-SG-040103	4/1/03 ~ 0950	TO-15 - " "	31	9	7.5"Hg
04A	SVP-140-SG-040103	4/1/03 ~ ~~1349~~ 0916	TO-15 - " "	26	4	9.0"Hg

Relinquished By: (Signature) Date/Time: Kate Launer 4/1/03 1430
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: Tony Badal 4/2/03 910 ATL

Notes:
48 TAT on analysis
Standard TAT in report (include data validation package)

Lab Use Only	Shipper Name	Air Bill # (1)	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	790246232336	TB	—	Good	(Yes) No None	030403

Form 1295

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Mike Sousa
Company: TRC Environmental
Address: 5 Waterside Crossing City: Windsor State: CT Zip: 06095
Phone: (860)298-6234 FAX: (860)298-6399
Collected By: Signature: Kate Launiat

Project info:
P.O. #:
Project #: 38182
Project Name: Silvuta/Sunset

Turn Around Time:
☐ Normal
☒ Rush SEE NOTES
Specify

MC 4/2/03

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
05A	SVP-1-SG-040103	4/1/03 - 1331	TO-15 - Refer to analyte list previously submitted	28.5	8	9.5 "Hg
06A	SVP-2-SG-040103	4/1/03 - 1132	TO-15 "	29	9	9.5 "Hg
07A	SVP-3-SG-040103	4/1/03 - 1145	TO-15 "	28	7	9.0 "Hg
08A	SVP-4-SG-040103	4/1/03 - 1138	TO-15 "	28.5	8.0	9.0 "Hg

Relinquished By: (Signature) Date/Time: Kate Launiat 4/1/03 1435
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: Tonya Pardo/ATL 4/2/03 910

Notes:
48hr TAT on analysis
Standard TAT on reports, include complete data validation package

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	802462232336	TB	—	Good	(Yes) No None	0304034

Form 1290 rev. 03

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CHAIN-OF-CUSTODY RECORD

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Mike Susca
Company: IRC Environmental
Address: 5 Waterside Crossing City: Windsor State: CT Zip: 06095
Phone: (860) 298-6234 FAX: (860) 298-6399
Collected By: Signature: Kate Launer

Project Info:
P.O. #:
Project #: 38182
Project Name: Mansfield Sawyer

Turn Around Time:
☒ Normal
☒ Rush: SEE NOTES (Specify)
mc 4/2/03

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
09A	Background Air Sample-040103-AM	4/1/03 ~ 0908	TO-15 - Refer to previously submitted analyte list	28.5	8.0	9.2 "Hg
10A	Background Air Sample-040103-PM	4/1/03 ~ 1327	TO-15 " "	29	8.5	7.0 "Hg
11A	Trip Blank 040103	4/1/03 ~ 1410	TO-15 " "	NA	NA	2.10 "Hg

Relinquished By: (Signature) Date/Time: Kate Launer 040103/1440
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: Tonia Bostok ATL 4/2/03 910

Notes:
48 hr. TAT on analyses
Standard TAT on report (include data validation package)

Lab Use Only

Shipper Name	Air Bill #	Opened By:	Temp. (°C):	Condition:	Custody Seals Intact?	Work Order #
Fedex	820462232336	TB	—	Good	Yes / No / None	0304034

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Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific
E-mail to:samplereceiving@airtoxics.com

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0304003B

Work Order Summary

CLIENT:	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095	**BILL TO:**	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095
PHONE:	860-298-6300	**P.O. #**	
FAX:		**PROJECT #**	38182 Solutia
DATE RECEIVED:	4/1/03	**CONTACT:**	Betty Chu
DATE COMPLETED:	4/11/03		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
11A	SVP-16-SG-033103	Modified TO-15/TIC	9.0 "Hg
12A	SVP-12-SG-033103	Modified TO-15/TIC	8.5 "Hg
12AA	SVP-12-SG-033103 Duplicate	Modified TO-15/TIC	8.5 "Hg
13A	SVP-15-SG-033103	Modified TO-15/TIC	8.0 "Hg
14A	SVP-8-SG-033103	Modified TO-15/TIC	8.5 "Hg
14AA	SVP-8-SG-033103 Duplicate	Modified TO-15/TIC	8.5 "Hg
15A	SVP-10-SG-033103	Modified TO-15/TIC	8.0 "Hg
16A	SVP-100-SG-033103	Modified TO-15/TIC	7.5 "Hg
17A	SVP-11-SG-033103	Modified TO-15/TIC	9.0 "Hg
18A	SVP-9-SG-033103	Modified TO-15/TIC	8.5 "Hg
19A	SVP-6-SG-033103	Modified TO-15/TIC	9.0 "Hg
20A	SVP-Background Sample-033103	Modified TO-15/TIC	8.0 "Hg
21A	Trip Blank 033103	Modified TO-15/TIC	29.0 "Hg
22A	Lab Blank	Modified TO-15/TIC	NA
22B	Lab Blank	Modified TO-15/TIC	NA
23A	CCV	Modified TO-15/TIC	NA
23B	CCV	Modified TO-15/TIC	NA
24A	LCS	Modified TO-15/TIC	NA
24B	LCS	Modified TO-15/TIC	NA

CERTIFIED BY: Linda A. Truman DATE: 04/14/03

Laboratory Director

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/02, Expiration date: 06/30/03
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
TRC Environmental Corporation
Workorder# 0304003B

Eleven 6 Liter Summa Canister samples were received on April 01, 2003. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-15*	*ATL Modifications*
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limt
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
IS recoveries	Within 40% of mean over ICAL for blanks, and w/in 40% of daily CCV for samples.	Within 40% of CCV recoveries for blank and samples.
Daily CCV	30% Difference	30% Difference with two allowed out up to 40%.
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The following compound, alpha-Chlorotoluene, indicated low bias (less than 70% expected recovery) in the daily CCV analyzed on 04-01-2003. Associated non-detects in samples SVP-10-SG-033103, SVP-100-SG-033103, SVP-11-SG-033103, SVP-9-SG-033103, SVP-6-SG-033103 , SVP-Background Sample-033103 , and Trip Blank 033103 were flagged to indicate estimated results with low bias.

The reported CCV for each daily batch may be derived from more than one individual analytical file due to the client's request for non-standard compounds.

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

By specific client request, Tetrafluoroethane was reported as a tentatively identified compound (TIC) to

assist in evaluation of the client sampling system.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated Peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

SAMPLE NAME: SVP-16-SG-033103

ID#: 0304003B-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040118**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**1.91**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.96	2.5	Not Detected	Not Detected
Methylene Chloride	0.96	3.4	Not Detected	Not Detected
1,1-Dichloroethane	0.96	3.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.96	3.8	Not Detected	Not Detected
Chloroform	0.96	4.7	Not Detected	Not Detected
1,1,1-Trichloroethane	0.96	5.3	Not Detected	Not Detected
Benzene	0.96	3.1	Not Detected	Not Detected
1,2-Dichloroethane	0.96	3.9	Not Detected	Not Detected
Trichloroethene	0.96	5.2	Not Detected	Not Detected
Tetrachloroethene	0.96	6.6	Not Detected	Not Detected
Chlorobenzene	0.96	4.5	Not Detected	Not Detected
alpha-Chlorotoluene	0.96	5.0	Not Detected	Not Detected
Acetone	3.8	9.2	Not Detected	Not Detected
Carbon Disulfide	3.8	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.8	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.8	11	Not Detected	Not Detected
Bromodichloromethane	3.8	26	Not Detected	Not Detected
4-Methyl-2-pentanone	3.8	16	3.9	16
Bromoform	3.8	40	Not Detected	Not Detected
tert-Butylbenzene	3.8	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-12-SG-033103

ID#: 0304003B-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040119**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**1.87**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.94	2.4	Not Detected	Not Detected
Methylene Chloride	0.94	3.3	Not Detected	Not Detected
1,1-Dichloroethane	0.94	3.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.94	3.8	Not Detected	Not Detected
Chloroform	0.94	4.6	Not Detected	Not Detected
1,1,1-Trichloroethane	0.94	5.2	9.8	54
Benzene	0.94	3.0	Not Detected	Not Detected
1,2-Dichloroethane	0.94	3.8	Not Detected	Not Detected
Trichloroethene	0.94	5.1	Not Detected	Not Detected
Tetrachloroethene	0.94	6.4	2.9	20
Chlorobenzene	0.94	4.4	Not Detected	Not Detected
alpha-Chlorotoluene	0.94	4.9	Not Detected	Not Detected
Acetone	3.7	9.0	Not Detected	Not Detected
Carbon Disulfide	3.7	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.7	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.7	11	Not Detected	Not Detected
Bromodichloromethane	3.7	25	Not Detected	Not Detected
4-Methyl-2-pentanone	3.7	16	Not Detected	Not Detected
Bromoform	3.7	39	Not Detected	Not Detected
tert-Butylbenzene	3.7	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.94	5.7	Not Detected	Not Detected
1,4-Dichlorobenzene	0.94	5.7	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

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SAMPLE NAME: SVP-12-SG-033103 Duplicate

ID#: 0304003B-12AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040120**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**1.87**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.94	2.4	Not Detected	Not Detected
Methylene Chloride	0.94	3.3	Not Detected	Not Detected
1,1-Dichloroethane	0.94	3.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.94	3.8	Not Detected	Not Detected
Chloroform	0.94	4.6	Not Detected	Not Detected
1,1,1-Trichloroethane	0.94	5.2	9.4	52
Benzene	0.94	3.0	Not Detected	Not Detected
1,2-Dichloroethane	0.94	3.8	Not Detected	Not Detected
Trichloroethene	0.94	5.1	Not Detected	Not Detected
Tetrachloroethene	0.94	6.4	2.8	19
Chlorobenzene	0.94	4.4	Not Detected	Not Detected
alpha-Chlorotoluene	0.94	4.9	Not Detected	Not Detected
Acetone	3.7	9.0	Not Detected	Not Detected
Carbon Disulfide	3.7	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.7	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.7	11	Not Detected	Not Detected
Bromodichloromethane	3.7	25	Not Detected	Not Detected
4-Methyl-2-pentanone	3.7	16	Not Detected	Not Detected
Bromoform	3.7	39	Not Detected	Not Detected
tert-Butylbenzene	3.7	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.94	5.7	Not Detected	Not Detected
1,4-Dichlorobenzene	0.94	5.7	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-15-SG-033103

ID#: 0304003B-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040123**	**Date of Collection: 3/31/03**	
Dil. Factor:	**1.83**	**Date of Analysis: 4/2/03**	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.92	2.4	Not Detected	Not Detected
Methylene Chloride	0.92	3.2	Not Detected	Not Detected
1,1-Dichloroethane	0.92	3.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.92	3.7	Not Detected	Not Detected
Chloroform	0.92	4.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.92	5.1	Not Detected	Not Detected
Benzene	0.92	3.0	Not Detected	Not Detected
1,2-Dichloroethane	0.92	3.8	Not Detected	Not Detected
Trichloroethene	0.92	5.0	Not Detected	Not Detected
Tetrachloroethene	0.92	6.3	Not Detected	Not Detected
Chlorobenzene	0.92	4.3	20	94
alpha-Chlorotoluene	0.92	4.8	Not Detected	Not Detected
Acetone	3.7	8.8	Not Detected	Not Detected
Carbon Disulfide	3.7	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.7	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.7	11	Not Detected	Not Detected
Bromodichloromethane	3.7	25	Not Detected	Not Detected
4-Methyl-2-pentanone	3.7	15	7.8	32
Bromoform	3.7	38	Not Detected	Not Detected
tert-Butylbenzene	3.7	20	Not Detected	Not Detected
Naphthalene	18	97	Not Detected	Not Detected
1,2-Dichlorobenzene	0.92	5.6	8.2	50
1,4-Dichlorobenzene	0.92	5.6	3.2	20

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-8-SG-033103

ID#: 0304003B-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040121**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**1.87**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.94	2.4	Not Detected	Not Detected
Methylene Chloride	0.94	3.3	Not Detected	Not Detected
1,1-Dichloroethane	0.94	3.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.94	3.8	Not Detected	Not Detected
Chloroform	0.94	4.6	11	53
1,1,1-Trichloroethane	0.94	5.2	Not Detected	Not Detected
Benzene	0.94	3.0	1.5	5.0
1,2-Dichloroethane	0.94	3.8	Not Detected	Not Detected
Trichloroethene	0.94	5.1	Not Detected	Not Detected
Tetrachloroethene	0.94	6.4	1.1	7.6
Chlorobenzene	0.94	4.4	Not Detected	Not Detected
alpha-Chlorotoluene	0.94	4.9	Not Detected	Not Detected
Acetone	3.7	9.0	11	28
Carbon Disulfide	3.7	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.7	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.7	11	Not Detected	Not Detected
Bromodichloromethane	3.7	25	Not Detected	Not Detected
4-Methyl-2-pentanone	3.7	16	Not Detected	Not Detected
Bromoform	3.7	39	Not Detected	Not Detected
tert-Butylbenzene	3.7	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.94	5.7	Not Detected	Not Detected
1,4-Dichlorobenzene	0.94	5.7	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	93	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-8-SG-033103 Duplicate

ID#: 0304003B-14AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040122**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**1.87**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.94	2.4	Not Detected	Not Detected
Methylene Chloride	0.94	3.3	Not Detected	Not Detected
1,1-Dichloroethane	0.94	3.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.94	3.8	Not Detected	Not Detected
Chloroform	0.94	4.6	11	55
1,1,1-Trichloroethane	0.94	5.2	Not Detected	Not Detected
Benzene	0.94	3.0	1.6	5.1
1,2-Dichloroethane	0.94	3.8	Not Detected	Not Detected
Trichloroethene	0.94	5.1	Not Detected	Not Detected
Tetrachloroethene	0.94	6.4	1.1	7.8
Chlorobenzene	0.94	4.4	Not Detected	Not Detected
alpha-Chlorotoluene	0.94	4.9	Not Detected	Not Detected
Acetone	3.7	9.0	12	28
Carbon Disulfide	3.7	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.7	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.7	11	Not Detected	Not Detected
Bromodichloromethane	3.7	25	Not Detected	Not Detected
4-Methyl-2-pentanone	3.7	16	Not Detected	Not Detected
Bromoform	3.7	39	Not Detected	Not Detected
tert-Butylbenzene	3.7	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.94	5.7	Not Detected	Not Detected
1,4-Dichlorobenzene	0.94	5.7	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	95	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-10-SG-033103

ID#: 0304003B-15A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040115**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**366**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	180	480	Not Detected	Not Detected
Methylene Chloride	180	650	Not Detected	Not Detected
1,1-Dichloroethane	180	750	Not Detected	Not Detected
cis-1,2-Dichloroethene	180	740	Not Detected	Not Detected
Chloroform	180	910	Not Detected	Not Detected
1,1,1-Trichloroethane	180	1000	Not Detected	Not Detected
Benzene	180	590	680	2200
1,2-Dichloroethane	180	750	Not Detected	Not Detected
Trichloroethene	180	1000	Not Detected	Not Detected
Tetrachloroethene	180	1300	Not Detected	Not Detected
Chlorobenzene	180	860	31000	140000
alpha-Chlorotoluene	180	960	Not Detected U J	Not Detected U J
Acetone	730	1800	Not Detected	Not Detected
Carbon Disulfide	730	2300	Not Detected	Not Detected
trans-1,2-Dichloroethene	730	2900	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	730	2200	Not Detected	Not Detected
Bromodichloromethane	730	5000	Not Detected	Not Detected
4-Methyl-2-pentanone	730	3000	Not Detected	Not Detected
Bromoform	730	7700	Not Detected	Not Detected
tert-Butylbenzene	730	4100	Not Detected	Not Detected
Naphthalene	3700	19000	Not Detected	Not Detected
1,2-Dichlorobenzene	180	1100	870	5300
1,4-Dichlorobenzene	180	1100	4500	28000

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	86	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-100-SG-033103

ID#: 0304003B-16A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040116**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**179**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	90	230	Not Detected	Not Detected
Methylene Chloride	90	320	Not Detected	Not Detected
1,1-Dichloroethane	90	370	Not Detected	Not Detected
cis-1,2-Dichloroethene	90	360	Not Detected	Not Detected
Chloroform	90	440	Not Detected	Not Detected
1,1,1-Trichloroethane	90	500	Not Detected	Not Detected
Benzene	90	290	660	2200
1,2-Dichloroethane	90	370	Not Detected	Not Detected
Trichloroethene	90	490	Not Detected	Not Detected
Tetrachloroethene	90	620	Not Detected	Not Detected
Chlorobenzene	90	420	32000	150000
alpha-Chlorotoluene	90	470	Not Detected U J	Not Detected U J
Acetone	360	860	Not Detected	Not Detected
Carbon Disulfide	360	1100	Not Detected	Not Detected
trans-1,2-Dichloroethene	360	1400	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	360	1100	Not Detected	Not Detected
Bromodichloromethane	360	2400	Not Detected	Not Detected
4-Methyl-2-pentanone	360	1500	Not Detected	Not Detected
Bromoform	360	3800	Not Detected	Not Detected
tert-Butylbenzene	360	2000	Not Detected	Not Detected
Naphthalene	1800	9500	Not Detected	Not Detected
1,2-Dichlorobenzene	90	550	810	4900
1,4-Dichlorobenzene	90	550	4400	27000

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	87	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-11-SG-033103

ID#: 0304003B-17A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040117**	**Date of Collection: 3/31/03**	
Dil. Factor:	**1.91**	**Date of Analysis: 4/1/03**	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.96	2.5	Not Detected	Not Detected
Methylene Chloride	0.96	3.4	Not Detected	Not Detected
1,1-Dichloroethane	0.96	3.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.96	3.8	Not Detected	Not Detected
Chloroform	0.96	4.7	Not Detected	Not Detected
1,1,1-Trichloroethane	0.96	5.3	170	950
Benzene	0.96	3.1	Not Detected	Not Detected
1,2-Dichloroethane	0.96	3.9	Not Detected	Not Detected
Trichloroethene	0.96	5.2	Not Detected	Not Detected
Tetrachloroethene	0.96	6.6	92	630
Chlorobenzene	0.96	4.5	Not Detected	Not Detected
alpha-Chlorotoluene	0.96	5.0	Not Detected U J	Not Detected U J
Acetone	3.8	9.2	Not Detected	Not Detected
Carbon Disulfide	3.8	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.8	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.8	11	Not Detected	Not Detected
Bromodichloromethane	3.8	26	Not Detected	Not Detected
4-Methyl-2-pentanone	3.8	16	Not Detected	Not Detected
Bromoform	3.8	40	Not Detected	Not Detected
tert-Butylbenzene	3.8	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	83	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-9-SG-033103

ID#: 0304003B-18A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040120**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**74.8**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	37	97	Not Detected	Not Detected
Methylene Chloride	37	130	Not Detected	Not Detected
1,1-Dichloroethane	37	150	Not Detected	Not Detected
cis-1,2-Dichloroethene	37	150	Not Detected	Not Detected
Chloroform	37	180	Not Detected	Not Detected
1,1,1-Trichloroethane	37	210	Not Detected	Not Detected
Benzene	37	120	Not Detected	Not Detected
1,2-Dichloroethane	37	150	Not Detected	Not Detected
Trichloroethene	37	200	Not Detected	Not Detected
Tetrachloroethene	37	260	55	380
Chlorobenzene	37	180	Not Detected	Not Detected
alpha-Chlorotoluene	37	200	Not Detected U J	Not Detected U J
Acetone	150	360	Not Detected	Not Detected
Carbon Disulfide	150	470	Not Detected	Not Detected
trans-1,2-Dichloroethene	150	600	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	150	450	Not Detected	Not Detected
Bromodichloromethane	150	1000	Not Detected	Not Detected
4-Methyl-2-pentanone	150	620	Not Detected	Not Detected
Bromoform	150	1600	Not Detected	Not Detected
tert-Butylbenzene	150	830	Not Detected	Not Detected
Naphthalene	750	4000	Not Detected	Not Detected
1,2-Dichlorobenzene	37	230	46	280
1,4-Dichlorobenzene	37	230	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	1800

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	84	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-6-SG-033103

ID#: 0304003B-19A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	b040119	Date of Collection:	3/31/03
Dil. Factor:	1.91	Date of Analysis:	4/1/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.96	2.5	Not Detected	Not Detected
Methylene Chloride	0.96	3.4	Not Detected	Not Detected
1,1-Dichloroethane	0.96	3.9	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.96	3.8	Not Detected	Not Detected
Chloroform	0.96	4.7	Not Detected	Not Detected
1,1,1-Trichloroethane	0.96	5.3	Not Detected	Not Detected
Benzene	0.96	3.1	Not Detected	Not Detected
1,2-Dichloroethane	0.96	3.9	Not Detected	Not Detected
Trichloroethene	0.96	5.2	Not Detected	Not Detected
Tetrachloroethene	0.96	6.6	150	1000
Chlorobenzene	0.96	4.5	Not Detected	Not Detected
alpha-Chlorotoluene	0.96	5.0	Not Detected U J	Not Detected U J
Acetone	3.8	9.2	6.7	16
Carbon Disulfide	3.8	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.8	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.8	11	Not Detected	Not Detected
Bromodichloromethane	3.8	26	Not Detected	Not Detected
4-Methyl-2-pentanone	3.8	16	Not Detected	Not Detected
Bromoform	3.8	40	Not Detected	Not Detected
tert-Butylbenzene	3.8	21	Not Detected	Not Detected
Naphthalene	19	100	Not Detected	Not Detected
1,2-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.96	5.8	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	83	70-130

AIR TOXICS LTD.

SAMPLE NAME: SVP-Background Sample-033103

ID#: 0304003B-20A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040121**	**Date of Collection: 3/31/03**	
Dil. Factor:	**1.83**	**Date of Analysis: 4/1/03**	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.92	2.4	Not Detected	Not Detected
Methylene Chloride	0.92	3.2	Not Detected	Not Detected
1,1-Dichloroethane	0.92	3.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.92	3.7	Not Detected	Not Detected
Chloroform	0.92	4.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.92	5.1	Not Detected	Not Detected
Benzene	0.92	3.0	Not Detected	Not Detected
1,2-Dichloroethane	0.92	3.8	Not Detected	Not Detected
Trichloroethene	0.92	5.0	Not Detected	Not Detected
Tetrachloroethene	0.92	6.3	Not Detected	Not Detected
Chlorobenzene	0.92	4.3	Not Detected	Not Detected
alpha-Chlorotoluene	0.92	4.8	Not Detected U J	Not Detected U J
Acetone	3.7	8.8	Not Detected	Not Detected
Carbon Disulfide	3.7	12	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.7	15	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.7	11	Not Detected	Not Detected
Bromodichloromethane	3.7	25	Not Detected	Not Detected
4-Methyl-2-pentanone	3.7	15	Not Detected	Not Detected
Bromoform	3.7	38	Not Detected	Not Detected
tert-Butylbenzene	3.7	20	Not Detected	Not Detected
Naphthalene	18	97	Not Detected	Not Detected
1,2-Dichlorobenzene	0.92	5.6	Not Detected	Not Detected
1,4-Dichlorobenzene	0.92	5.6	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	84	70-130

AIR TOXICS LTD.

SAMPLE NAME: Trip Blank 033103

ID#: 0304003B-21A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040122**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected U J	Not Detected U J
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
tert-Butylbenzene	2.0	11	Not Detected	Not Detected
Naphthalene	10	53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	83	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0304003B-22A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d040107	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 4/1/03	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
tert-Butylbenzene	2.0	11	Not Detected	Not Detected
Naphthalene	10	53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrahydrofuran	BLNK01	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	93	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0304003B-22B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040107**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/1/03**	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected U J	Not Detected U J
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
tert-Butylbenzene	2.0	11	Not Detected	Not Detected
Naphthalene	10	53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrahydrofuran	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	83	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0304003B-23A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/1/03**	

Compound	%Recovery
Vinyl Chloride	85
Methylene Chloride	80
1,1-Dichloroethane	84
cis-1,2-Dichloroethene	85
Chloroform	85
1,1,1-Trichloroethane	89
Benzene	85
1,2-Dichloroethane	85
Trichloroethene	86
Tetrachloroethene	84
Chlorobenzene	84
alpha-Chlorotoluene	88
Acetone	90
Carbon Disulfide	88
trans-1,2-Dichloroethene	87
2-Butanone (Methyl Ethyl Ketone)	90
Bromodichloromethane	95
4-Methyl-2-pentanone	94
Bromoform	98
tert-Butylbenzene	110
Naphthalene	92
1,2-Dichlorobenzene	84
1,4-Dichlorobenzene	87

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Spiked

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0304003B-23B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/1/03**	

Compound	%Recovery
Vinyl Chloride	104
Methylene Chloride	108
1,1-Dichloroethane	114
cis-1,2-Dichloroethene	115
Chloroform	111
1,1,1-Trichloroethane	111
Benzene	108
1,2-Dichloroethane	121
Trichloroethene	114
Tetrachloroethene	118
Chlorobenzene	105
alpha-Chlorotoluene	61 Q
Acetone	94
Carbon Disulfide	81
trans-1,2-Dichloroethene	81
2-Butanone (Methyl Ethyl Ketone)	100
Bromodichloromethane	92
4-Methyl-2-pentanone	106
Bromoform	84
tert-Butylbenzene	77
Naphthalene	90
1,2-Dichlorobenzene	70
1,4-Dichlorobenzene	74

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Spiked

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	85	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0304003B-24A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/1/03**	

Compound	%Recovery
Vinyl Chloride	90
Methylene Chloride	78
1,1-Dichloroethane	74
cis-1,2-Dichloroethene	84
Chloroform	81
1,1,1-Trichloroethane	83
Benzene	90
1,2-Dichloroethane	85
Trichloroethene	89
Tetrachloroethene	89
Chlorobenzene	85
alpha-Chlorotoluene	99
Acetone	84
Carbon Disulfide	85
trans-1,2-Dichloroethene	88
2-Butanone (Methyl Ethyl Ketone)	84
Bromodichloromethane	85
4-Methyl-2-pentanone	86
Bromoform	81
tert-Butylbenzene	Not Spiked
Naphthalene	Not Spiked
1,2-Dichlorobenzene	85
1,4-Dichlorobenzene	82

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Spiked

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0304003B-24B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040104**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/1/03**	

Compound	%Recovery
Vinyl Chloride	122
Methylene Chloride	109
1,1-Dichloroethane	104
cis-1,2-Dichloroethene	119
Chloroform	110
1,1,1-Trichloroethane	110
Benzene	117
1,2-Dichloroethane	126
Trichloroethene	122
Tetrachloroethene	129
Chlorobenzene	109
alpha-Chlorotoluene	68 Q
Acetone	88
Carbon Disulfide	80
trans-1,2-Dichloroethene	87
2-Butanone (Methyl Ethyl Ketone)	95
Bromodichloromethane	82
4-Methyl-2-pentanone	96
Bromoform	70
tert-Butylbenzene	Not Spiked
Naphthalene	Not Spiked
1,2-Dichlorobenzene	71
1,4-Dichlorobenzene	71

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Spiked

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	86	70-130

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AIR ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Mike Susca
Company: TRC Environmental
Address: 5 Waterside Crossing City: Windsor State: CT Zip: 06095
Phone: (860) 298 6234 FAX: (860) 298-6399
Collected By: Signature: Kate Lawniel

Project Info:
P.O. #:
Project #: 38182
Project Name: Solutia/Sauget

Turn Around Time:
☐ Normal
☒ Hush SEE NOTES (Specify)

ML 4-01-3

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canistor Pressure / Vacuum Initial	Final	Receipt
11A	SVP-16-SG-033103	3/31/03 ~ 1022	& TO-15 refer to list previously submitted	29	8.5	9.0
12A	SVP-12-SG-033103	3/31/03 ~ 1041	TO-15 " "	28.5	8.5	8.5
13A	SVP-15-SG-033103	3/31/03 ~ 1145	TO-15 " "	29.0	9.0	8.0
14A	SVP-8-SG-033103	3/31/03 ~ 1154	TO-15 " "	29.0	9.0	8.5

Relinquished By: (Signature) Date/Time: Kate Lawniel 3/31/03 1615
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: Tonia Bartol ATL 4/1/03 920

Notes: 48 hour TAT on analysis
Standard TAT on report

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	8834 5504 3503	TB	—	Good	Yes / No / None	03040038

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FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Mike Susca
Company: TRC Environmental
Address: 5 Waterside Crossing City: Windsor State: CT Zip: 06095
Phone: (860) 298-6234 FAX: (860) 298-6399
Collected By: Signature: Kate Lauriat

Project info:
P.O. #
Project #: 38182
Project Name: Solutia Sauget

Turn Around Time:
☐ Normal
☒ Rush: See notes (Specify)
ML 4.01.03

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
15A	SVP-10-SG-033103	3/31/03 ~ 1412	TO-15 – refer to analyte list previously submitted	30	8	8.0 "Hg
16A	SVP-100-SG-033103	3/31/03 ~ 1412	TO-15 – " "	29	9	7.5 "Hg

Relinquished by: (Signature) Date/Time	Received By: (Signature) Date/Time
Kate Lauriat 3/31/03 1640	
Relinquished By: (Signature) Date/Time	Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time	Received By: (Signature) Date/Time
	Tony Barbel ATL 4/1/03 920

Notes:
48 hour TAT on analysis
Standard TAT on report

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	8334 5504 3508	TB	—	Good	(Yes) No None	0304003B

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CHAIN-OF-CUSTODY RECORD

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Page ___ of ___

Contact Person: Mike Susca
Company: TRC Environmental
Address: 5 Waterside Crossing City: Windsor State: CT Zip: 06095
Phone: (860) 298-6234 FAX: (860) 298-6399
Collected By: Signature: Kate Lawniak

Project info:
P.O. #:
Project #: 78182
Project Name: Stiefel/Sanofi

Turn Around Time:
☐ Normal
☒ Rush See Notes
Specify

ML 4.01.03

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum: Initial	Final	Receipt
17A	SVP-11-SG-033103	3/31/03 - 1548	TO-15 - refer to analyte list previously submitted	28.5	8.5	9.0"Hg
18A	SVP-9-SG-033103	3/31/03 - 1542	TO-15 - " "	28.5	8.5	8.5"Hg
19A	SVP-6-SG-033103	3/31/03 - 1528	TO-15 - " "	29	9	9.0"Hg
20A	Background Sample 033103	3/31/03 - 1547	TO-15 - " "	28	7.5	8.0"Hg

Relinquished By: (Signature) Date/Time: Kate Lawniak 3/31/03 1625
Received By: (Signature) Date/Time: [illegible] 7/1/03 915
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: 4/1/03

Notes:
48 hr TAT on analysis
Standard TAT on report

Lab Use Only

Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
FedEx	183345504 3508	CA		Good	(Yes) No None	0304003B

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CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Mike Sisca
Company: TRC Environmental
Address: 5 Waterside Crossing City: Windsor State: CT Zip: 06095
Phone: (860) 298-6234 FAX: (860) 298-6399
Collected By: Signature: [signature]

Project info:
P.O. #
Project #: 38182
Project Name: Solutia/Saugot

Turn Around Time:
☐ Normal
☒ Rush
Specify

MC 4-01-?

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
21A	Trip Blank 033103	3/31/03 1830	TO-15 per target analyte list already submitted	NA	NA	NA
–	Trip Blank 033103	3/31/03 1835	TO-13 " "	NA	NA	NA

2904g

Relinquished By: (Signature) Date/Time: [signature] 3/31/03 1830
Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time: [signature] ATL 4/1/03 920

Notes:
48 hr TAT for analysis
Standard TAT for report

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	8334 5504 3508	TB	—	Good	(Yes) No None	0304003B

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Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0304003A

Work Order Summary

CLIENT:	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095	**BILL TO:**	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095
PHONE:	860-298-6300	**P.O. #**	
FAX:		**PROJECT #**	38182 Solutia
DATE RECEIVED:	4/1/03	**CONTACT:**	Betty Chu
DATE COMPLETED:	4/14/03		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	BBZ-Office-9910	Modified TO-15/TIC	6.5 "Hg
02A	BBZ-Intake-9584	Modified TO-15/TIC	6.5 "Hg
03A	BBG-Office-9571	Modified TO-15/TIC	6.5 "Hg
04A	BBG-Intake-96105	Modified TO-15/TIC	4.5 "Hg
05A	CCB-Office-TO1560	Modified TO-15/TIC	6.5 "Hg
06A	CCB-Intake-14883	Modified TO-15/TIC	4.5 "Hg
07A	BK-1st Fl. Office-24489	Modified TO-15/TIC	6.5 "Hg
08A	BK-Intake-33584	Modified TO-15/TIC	4.5 "Hg
09A	BK-Dist-TO1627	Modified TO-15/TIC	6.5 "Hg
10A	BK-Dist-Duplicate-1584	Modified TO-15/TIC	6.5 "Hg
11A	Lab Blank	Modified TO-15/TIC	NA
11B	Lab Blank	Modified TO-15/TIC	NA
12A	CCV	Modified TO-15/TIC	NA
12B	CCV	Modified TO-15/TIC	NA
13A	LCS	Modified TO-15/TIC	NA
13B	LCS	Modified TO-15/TIC	NA

CERTIFIED BY: Linda A. Frumarx DATE: 04/14/03

Laboratory Director

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/02, Expiration date: 06/30/03
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
Modified TO-15
TRC Environmental Corporation
Workorder# 0304003A

Ten 6 Liter Summa Canister samples were received on April 01, 2003. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-15*	*ATL Modifications*
BFB acceptance criteria	CLP protocol	SW-846 protocol
Concentration of IS spike	10 ppbv	25 ppbv when 0.5/2.0 ppbv is used for the reporting limt
Dilutions for initial calibration	Dynamic dilutions or static using canisters	Syringe dilutions
IS recoveries	Within 40% of mean over ICAL for blanks, and w/in 40% of daily CCV for samples.	Within 40% of CCV recoveries for blank and samples.
Daily CCV	30% Difference	30% Difference with two allowed out up to 40%.
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Sample CCB-Office-TO1560 was analyzed 19 minutes past a 72 hour hold time. The client was notified and permission given to proceed with analysis and reporting.

The following compound, alpha-Chlorotoluene, indicated low bias (less than 70% expected recovery) in the daily CCV analyzed on 04/01/03. Associated non-detects in samples BBZ-Office-9910, BBZ-Intake-9584, BBG-Office-9571 and BBG-Intake-96105 were flagged to indicate estimated results with low bias.

The reported CCV for each daily batch may be derived from more than one individual analytical file due to the client's request for non-standard compounds.

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

By specific client request, Tetrafluoroethane was reported as a tentatively identified compound (TIC) to assist in evaluation of the client sampling system.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated Peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

SAMPLE NAME: BBZ-Office-9910

ID#: 0304003A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	b040108	Date of Collection:	3/29/03
Dil. Factor:	1.71	Date of Analysis:	4/1/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.86	2.2	Not Detected	Not Detected
Methylene Chloride	0.86	3.0	60	210
1,1-Dichloroethane	0.86	3.5	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.86	3.4	Not Detected	Not Detected
Chloroform	0.86	4.2	Not Detected	Not Detected
1,1,1-Trichloroethane	0.86	4.7	Not Detected	Not Detected
Benzene	0.86	2.8	Not Detected	Not Detected
1,2-Dichloroethane	0.86	3.5	Not Detected	Not Detected
Trichloroethene	0.86	4.7	Not Detected	Not Detected
Tetrachloroethene	0.86	5.9	Not Detected	Not Detected
Chlorobenzene	0.86	4.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.86	4.5	Not Detected U J	Not Detected U J
Acetone	3.4	8.2	7.4	18
Carbon Disulfide	3.4	11	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.4	14	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	10	20	61
Bromodichloromethane	3.4	23	Not Detected	Not Detected
4-Methyl-2-pentanone	3.4	14	130	530
Bromoform	3.4	36	Not Detected	Not Detected
tert-Butylbenzene	3.4	19	Not Detected	Not Detected
Naphthalene	17	91	Not Detected	Not Detected
1,2-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected
1,4-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	84	70-130

AIR TOXICS LTD.

SAMPLE NAME: BBZ-Intake-9584

ID#: 0304003A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	b040109	Date of Collection:	3/29/03
Dil. Factor:	1.71	Date of Analysis:	4/1/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.86	2.2	Not Detected	Not Detected
Methylene Chloride	0.86	3.0	25	88
1,1-Dichloroethane	0.86	3.5	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.86	3.4	Not Detected	Not Detected
Chloroform	0.86	4.2	Not Detected	Not Detected
1,1,1-Trichloroethane	0.86	4.7	Not Detected	Not Detected
Benzene	0.86	2.8	Not Detected	Not Detected
1,2-Dichloroethane	0.86	3.5	Not Detected	Not Detected
Trichloroethene	0.86	4.7	Not Detected	Not Detected
Tetrachloroethene	0.86	5.9	Not Detected	Not Detected
Chlorobenzene	0.86	4.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.86	4.5	Not Detected U J	Not Detected U J
Acetone	3.4	8.2	5.2	12
Carbon Disulfide	3.4	11	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.4	14	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	10	22	67
Bromodichloromethane	3.4	23	Not Detected	Not Detected
4-Methyl-2-pentanone	3.4	14	160	660
Bromoform	3.4	36	Not Detected	Not Detected
tert-Butylbenzene	3.4	19	Not Detected	Not Detected
Naphthalene	17	91	Not Detected	Not Detected
1,2-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected
1,4-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	359-35-3	NA	Not Detected
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	84	70-130

AIR TOXICS LTD.

SAMPLE NAME: BBG-Office-9571

ID#: 0304003A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040110**	**Date of Collection:**	**3/29/03**
Dil. Factor:	**1.71**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.86	2.2	Not Detected	Not Detected
Methylene Chloride	0.86	3.0	87	310
1,1-Dichloroethane	0.86	3.5	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.86	3.4	Not Detected	Not Detected
Chloroform	0.86	4.2	Not Detected	Not Detected
1,1,1-Trichloroethane	0.86	4.7	Not Detected	Not Detected
Benzene	0.86	2.8	0.86	2.8
1,2-Dichloroethane	0.86	3.5	Not Detected	Not Detected
Trichloroethene	0.86	4.7	Not Detected	Not Detected
Tetrachloroethene	0.86	5.9	Not Detected	Not Detected
Chlorobenzene	0.86	4.0	0.86	4.0
alpha-Chlorotoluene	0.86	4.5	Not Detected U J	Not Detected U J
Acetone	3.4	8.2	110	260
Carbon Disulfide	3.4	11	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.4	14	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	10	21	62
Bromodichloromethane	3.4	23	Not Detected	Not Detected
4-Methyl-2-pentanone	3.4	14	5.4	22
Bromoform	3.4	36	Not Detected	Not Detected
tert-Butylbenzene	3.4	19	Not Detected	Not Detected
Naphthalene	17	91	Not Detected	Not Detected
1,2-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected
1,4-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	359-35-3	NA	Not Detected
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: BBG-Intake-96105

ID#: 0304003A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040111**	**Date of Collection: 3/29/03**	
Dil. Factor:	**1.58**	**Date of Analysis: 4/1/03**	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.79	2.0	Not Detected	Not Detected
Methylene Chloride	0.79	2.8	Not Detected	Not Detected
1,1-Dichloroethane	0.79	3.2	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.79	3.2	Not Detected	Not Detected
Chloroform	0.79	3.9	Not Detected	Not Detected
1,1,1-Trichloroethane	0.79	4.4	Not Detected	Not Detected
Benzene	0.79	2.6	Not Detected	Not Detected
1,2-Dichloroethane	0.79	3.2	Not Detected	Not Detected
Trichloroethene	0.79	4.3	Not Detected	Not Detected
Tetrachloroethene	0.79	5.4	Not Detected	Not Detected
Chlorobenzene	0.79	3.7	Not Detected	Not Detected
alpha-Chlorotoluene	0.79	4.2	Not Detected U J	Not Detected U J
Acetone	3.2	7.6	Not Detected	Not Detected
Carbon Disulfide	3.2	10	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.2	13	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.2	9.5	9.8	30
Bromodichloromethane	3.2	22	Not Detected	Not Detected
4-Methyl-2-pentanone	3.2	13	Not Detected	Not Detected
Bromoform	3.2	33	Not Detected	Not Detected
tert-Butylbenzene	3.2	18	Not Detected	Not Detected
Naphthalene	16	84	Not Detected	Not Detected
1,2-Dichlorobenzene	0.79	4.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.79	4.8	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	359-35-3	NA	Not Detected
Tetrafluoroethane	BLNK01	NA	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	84	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCB-Office-TO1560

ID#: 0304003A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040116**	**Date of Collection:**	**3/29/03**
Dil. Factor:	**2.74**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	1.4	3.6	Not Detected	Not Detected
Methylene Chloride	1.4	4.8	440	1600
1,1-Dichloroethane	1.4	5.6	Not Detected	Not Detected
cis-1,2-Dichloroethene	1.4	5.5	Not Detected	Not Detected
Chloroform	1.4	6.8	Not Detected	Not Detected
1,1,1-Trichloroethane	1.4	7.6	Not Detected	Not Detected
Benzene	1.4	4.4	Not Detected	Not Detected
1,2-Dichloroethane	1.4	5.6	Not Detected	Not Detected
Trichloroethene	1.4	7.5	Not Detected	Not Detected
Tetrachloroethene	1.4	9.4	Not Detected	Not Detected
Chlorobenzene	1.4	6.4	1.6	7.7
alpha-Chlorotoluene	1.4	7.2	Not Detected	Not Detected
Acetone	5.5	13	20	49
Carbon Disulfide	5.5	17	Not Detected	Not Detected
trans-1,2-Dichloroethene	5.5	22	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.5	16	Not Detected	Not Detected
Bromodichloromethane	5.5	37	Not Detected	Not Detected
4-Methyl-2-pentanone	5.5	23	Not Detected	Not Detected
Bromoform	5.5	58	Not Detected	Not Detected
tert-Butylbenzene	5.5	30	Not Detected	Not Detected
Naphthalene	27	140	Not Detected	Not Detected
1,2-Dichlorobenzene	1.4	8.4	Not Detected	Not Detected
1,4-Dichlorobenzene	1.4	8.4	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	359-35-3	NA	Not Detected
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCB-Intake-14883

ID#: 0304003A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040112**	**Date of Collection:**	**3/29/03**
Dil. Factor:	**1.58**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.79	2.0	Not Detected	Not Detected
Methylene Chloride	0.79	2.8	3.1	11
1,1-Dichloroethane	0.79	3.2	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.79	3.2	Not Detected	Not Detected
Chloroform	0.79	3.9	Not Detected	Not Detected
1,1,1-Trichloroethane	0.79	4.4	Not Detected	Not Detected
Benzene	0.79	2.6	0.92	3.0
1,2-Dichloroethane	0.79	3.2	Not Detected	Not Detected
Trichloroethene	0.79	4.3	Not Detected	Not Detected
Tetrachloroethene	0.79	5.4	Not Detected	Not Detected
Chlorobenzene	0.79	3.7	1.0	4.7
alpha-Chlorotoluene	0.79	4.2	Not Detected	Not Detected
Acetone	3.2	7.6	3.4	8.3
Carbon Disulfide	3.2	10	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.2	13	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.2	9.5	Not Detected	Not Detected
Bromodichloromethane	3.2	22	Not Detected	Not Detected
4-Methyl-2-pentanone	3.2	13	Not Detected	Not Detected
Bromoform	3.2	33	Not Detected	Not Detected
tert-Butylbenzene	3.2	18	Not Detected	Not Detected
Naphthalene	16	84	Not Detected	Not Detected
1,2-Dichlorobenzene	0.79	4.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.79	4.8	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	359-35-3	NA	Not Detected
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: BK-1st Fl. Office-24489

ID#: 0304003A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040108**	**Date of Collection:**	**3/29/03**
Dil. Factor:	**1.71**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.86	2.2	Not Detected	Not Detected
Methylene Chloride	0.86	3.0	13	45
1,1-Dichloroethane	0.86	3.5	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.86	3.4	Not Detected	Not Detected
Chloroform	0.86	4.2	Not Detected	Not Detected
1,1,1-Trichloroethane	0.86	4.7	Not Detected	Not Detected
Benzene	0.86	2.8	Not Detected	Not Detected
1,2-Dichloroethane	0.86	3.5	Not Detected	Not Detected
Trichloroethene	0.86	4.7	Not Detected	Not Detected
Tetrachloroethene	0.86	5.9	Not Detected	Not Detected
Chlorobenzene	0.86	4.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.86	4.5	Not Detected	Not Detected
Acetone	3.4	8.2	4.4	11
Carbon Disulfide	3.4	11	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.4	14	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	10	Not Detected	Not Detected
Bromodichloromethane	3.4	23	Not Detected	Not Detected
4-Methyl-2-pentanone	3.4	14	Not Detected	Not Detected
Bromoform	3.4	36	Not Detected	Not Detected
tert-Butylbenzene	3.4	19	Not Detected	Not Detected
Naphthalene	17	91	Not Detected	Not Detected
1,2-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected
1,4-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	359-35-3	NA	Not Detected
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	91	70-130

AIR TOXICS LTD.

SAMPLE NAME: BK-Intake-33584

ID#: 0304003A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040111**	**Date of Collection:**	**3/29/03**
Dil. Factor:	**1.58**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.79	2.0	Not Detected	Not Detected
Methylene Chloride	0.79	2.8	2.2	8.0
1,1-Dichloroethane	0.79	3.2	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.79	3.2	Not Detected	Not Detected
Chloroform	0.79	3.9	Not Detected	Not Detected
1,1,1-Trichloroethane	0.79	4.4	Not Detected	Not Detected
Benzene	0.79	2.6	Not Detected	Not Detected
1,2-Dichloroethane	0.79	3.2	Not Detected	Not Detected
Trichloroethene	0.79	4.3	Not Detected	Not Detected
Tetrachloroethene	0.79	5.4	Not Detected	Not Detected
Chlorobenzene	0.79	3.7	0.94	4.4
alpha-Chlorotoluene	0.79	4.2	Not Detected	Not Detected
Acetone	3.2	7.6	4.5	11
Carbon Disulfide	3.2	10	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.2	13	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.2	9.5	Not Detected	Not Detected
Bromodichloromethane	3.2	22	Not Detected	Not Detected
4-Methyl-2-pentanone	3.2	13	Not Detected	Not Detected
Bromoform	3.2	33	Not Detected	Not Detected
tert-Butylbenzene	3.2	18	Not Detected	Not Detected
Naphthalene	16	84	Not Detected	Not Detected
1,2-Dichlorobenzene	0.79	4.8	Not Detected	Not Detected
1,4-Dichlorobenzene	0.79	4.8	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	359-35-3	NA	Not Detected
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	91	70-130

AIR TOXICS LTD.

SAMPLE NAME: BK-Dist-TO1627

ID#: 0304003A-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040109**	**Date of Collection:**	**3/29/03**
Dil. Factor:	**1.71**	**Date of Analysis:**	**4/1/03**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.86	2.2	Not Detected	Not Detected
Methylene Chloride	0.86	3.0	24	86
1,1-Dichloroethane	0.86	3.5	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.86	3.4	Not Detected	Not Detected
Chloroform	0.86	4.2	Not Detected	Not Detected
1,1,1-Trichloroethane	0.86	4.7	Not Detected	Not Detected
Benzene	0.86	2.8	Not Detected	Not Detected
1,2-Dichloroethane	0.86	3.5	Not Detected	Not Detected
Trichloroethene	0.86	4.7	Not Detected	Not Detected
Tetrachloroethene	0.86	5.9	Not Detected	Not Detected
Chlorobenzene	0.86	4.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.86	4.5	Not Detected	Not Detected
Acetone	3.4	8.2	4.0	9.7
Carbon Disulfide	3.4	11	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.4	14	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	10	Not Detected	Not Detected
Bromodichloromethane	3.4	23	Not Detected	Not Detected
4-Methyl-2-pentanone	3.4	14	Not Detected	Not Detected
Bromoform	3.4	36	Not Detected	Not Detected
tert-Butylbenzene	3.4	19	Not Detected	Not Detected
Naphthalene	17	91	Not Detected	Not Detected
1,2-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected
1,4-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	359-35-3	NA	Not Detected
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	93	70-130

AIR TOXICS LTD.

SAMPLE NAME: BK-Dist-Duplicate-1584

ID#: 0304003A-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	d040110	Date of Collection:	3/29/03
Dil. Factor:	1.71	Date of Analysis:	4/1/03

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.86	2.2	Not Detected	Not Detected
Methylene Chloride	0.86	3.0	18	62
1,1-Dichloroethane	0.86	3.5	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.86	3.4	Not Detected	Not Detected
Chloroform	0.86	4.2	Not Detected	Not Detected
1,1,1-Trichloroethane	0.86	4.7	Not Detected	Not Detected
Benzene	0.86	2.8	Not Detected	Not Detected
1,2-Dichloroethane	0.86	3.5	Not Detected	Not Detected
Trichloroethene	0.86	4.7	Not Detected	Not Detected
Tetrachloroethene	0.86	5.9	Not Detected	Not Detected
Chlorobenzene	0.86	4.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.86	4.5	Not Detected	Not Detected
Acetone	3.4	8.2	4.1	9.8
Carbon Disulfide	3.4	11	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.4	14	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	10	Not Detected	Not Detected
Bromodichloromethane	3.4	23	Not Detected	Not Detected
4-Methyl-2-pentanone	3.4	14	Not Detected	Not Detected
Bromoform	3.4	36	Not Detected	Not Detected
tert-Butylbenzene	3.4	19	Not Detected	Not Detected
Naphthalene	17	91	Not Detected	Not Detected
1,2-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected
1,4-Dichlorobenzene	0.86	5.2	Not Detected	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Tetrafluoroethane	359-35-3	NA	Not Detected
Tetrafluoroethane	BLNK01	NA	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	91	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0304003A-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040107**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/1/03**	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
tert-Butylbenzene	2.0	11	Not Detected	Not Detected
Naphthalene	10	53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	93	70-130

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SAMPLE NAME: Lab Blank

ID#: 0304003A-11B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040107**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/1/03**	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected U J	Not Detected U J
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Bromodichloromethane	2.0	14	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
tert-Butylbenzene	2.0	11	Not Detected	Not Detected
Naphthalene	10	53	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	83	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0304003A-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/1/03**	

Compound	%Recovery
Vinyl Chloride	85
Methylene Chloride	80
1,1-Dichloroethane	84
cis-1,2-Dichloroethene	85
Chloroform	85
1,1,1-Trichloroethane	89
Benzene	85
1,2-Dichloroethane	85
Trichloroethene	86
Tetrachloroethene	84
Chlorobenzene	84
alpha-Chlorotoluene	88
Acetone	90
Carbon Disulfide	88
trans-1,2-Dichloroethene	87
2-Butanone (Methyl Ethyl Ketone)	90
Bromodichloromethane	95
4-Methyl-2-pentanone	94
Bromoform	98
tert-Butylbenzene	110
Naphthalene	92
1,2-Dichlorobenzene	84
1,4-Dichlorobenzene	87

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0304003A-12B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/1/03**	

Compound	%Recovery
Vinyl Chloride	104
Methylene Chloride	108
1,1-Dichloroethane	114
cis-1,2-Dichloroethene	115
Chloroform	111
1,1,1-Trichloroethane	111
Benzene	108
1,2-Dichloroethane	121
Trichloroethene	114
Tetrachloroethene	118
Chlorobenzene	105
alpha-Chlorotoluene	61 Q
Acetone	94
Carbon Disulfide	81
trans-1,2-Dichloroethene	81
2-Butanone (Methyl Ethyl Ketone)	100
Bromodichloromethane	92
4-Methyl-2-pentanone	106
Bromoform	84
tert-Butylbenzene	77
Naphthalene	90
1,2-Dichlorobenzene	70
1,4-Dichlorobenzene	74

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	85	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0304003A-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**d040103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/1/03**	

Compound	%Recovery
Vinyl Chloride	90
Methylene Chloride	78
1,1-Dichloroethane	74
cis-1,2-Dichloroethene	84
Chloroform	81
1,1,1-Trichloroethane	83
Benzene	90
1,2-Dichloroethane	85
Trichloroethene	89
Tetrachloroethene	89
Chlorobenzene	85
alpha-Chlorotoluene	99
Acetone	84
Carbon Disulfide	85
trans-1,2-Dichloroethene	88
2-Butanone (Methyl Ethyl Ketone)	84
Bromodichloromethane	85
4-Methyl-2-pentanone	86
Bromoform	81
tert-Butylbenzene	Not Spiked
Naphthalene	Not Spiked
1,2-Dichlorobenzene	85
1,4-Dichlorobenzene	82

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0304003A-13B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**b040104**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/1/03**	

Compound	%Recovery
Vinyl Chloride	122
Methylene Chloride	109
1,1-Dichloroethane	104
cis-1,2-Dichloroethene	119
Chloroform	110
1,1,1-Trichloroethane	110
Benzene	117
1,2-Dichloroethane	126
Trichloroethene	122
Tetrachloroethene	129
Chlorobenzene	109
alpha-Chlorotoluene	68 Q
Acetone	88
Carbon Disulfide	80
trans-1,2-Dichloroethene	87
2-Butanone (Methyl Ethyl Ketone)	95
Bromodichloromethane	82
4-Methyl-2-pentanone	96
Bromoform	70
tert-Butylbenzene	Not Spiked
Naphthalene	Not Spiked
1,2-Dichlorobenzene	71
1,4-Dichlorobenzene	71

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	86	70-130

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CHAIN-OF-CUSTODY RECORD

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Page __ of __

Contact Person: Gary Ritter
Company: TRC
Address: Lakeside Crossing City: Windsor State: CT Zip: 06095
Phone: 860-298-6256 FAX: 860-298-6380
Collected By: Signature: Dennis P. Ryder

Project info:
P.O. #:
Project #: 38182
Project Name: Solutia

Turn Around Time:
☐ Normal
☒ Rush ____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Start	Finish	Canister Pressure / Vacuum Initial	Final	Receipt
01A	BBZ-office-9910	3/29/03	TO15	13:36	21:58	28.0	6.0	6.5" Hg
02A	BBZ-Intake-9584			13:30	21:53	30.0	11.0	6.5" Hg
03A	BBG-office-9571			13:16	21:29	30.0	7.0	6.5" Hg
04A	BBG-Intake-96105			13:21	21:34	28.0	8.0	4.5" Hg
05A	CCB-office-TO1560			13:08	21:16	28.5	7.0	6.5" Hg
06A	CCB-Intake-14883			12:39	21:11	29.5	6.5	4.5" Hg
07A	BK-1st Fl. office-24489			12:08	20:16	27.5	5.1	6.5" Hg
08A	BK-Intake-33584			12:30	20:55	29.0	5.0	4.5" Hg
09A	BK-DIST-TO1627			12:19	20:32	29.0	7.0	6.5" Hg
10A	BK-DIST-Duplicate-1589			12:20	20:37	30.0	8.5	6.5" Hg

Relinquished By: (Signature) Date/Time: Dennis P Ryder 3/31/03
Received By: (Signature) Date/Time: 09:00
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: Fed Ex AIR 4/1/03 930
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:

Notes:

Lab Use Only	Shipper Name	Air Bill #	Opened By	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex	8024 22 32244	CM		Good	Yes No (None)	0304003

TO-13

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This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

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WORK ORDER #: 0304039R1

Work Order Summary

CLIENT:	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095	**BILL TO:**	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095
PHONE:	860-298-6300	**P.O. #**	
FAX:		**PROJECT #**	38182 Solutia/Sauget
DATE RECEIVED:	4/2/03	**CONTACT:**	Betty Chu
DATE COMPLETED:	4/14/03		
DATE REISSUED:	4/15/01		

FRACTION #	NAME	TEST
01A	SVP-1-SG-040103	Modified TO-13A/TIC
01AA	SVP-1-SG-040103 Duplicate	Modified TO-13A/TIC
02A	SVP-2-SG-040103	Modified TO-13A/TIC
03A	SVP-3-SG-040103	Modified TO-13A/TIC
04A	SVP-4-SG-040103	Modified TO-13A/TIC
05A	SVP-5-SG-040103	Modified TO-13A/TIC
06A	SVP-14-SG-040103	Modified TO-13A/TIC
07A	SVP-17-SG-040103	Modified TO-13A/TIC
08A	SVP-140-SG-040103	Modified TO-13A/TIC
09A	Background Air Sample 040103-AM	Modified TO-13A/TIC
10A	Background Air Sample 040103-PM	Modified TO-13A/TIC
11A	Trip Blank 040103	Modified TO-13A/TIC
12A	Lab Blank	Modified TO-13A/TIC
13A	LCS	Modified TO-13A/TIC

CERTIFIED BY: Linda D. Frumarx DATE: 04/15/03

Laboratory Director

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/02, Expiration date: 06/30/03
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
Modified TO-13A
TRC Environmental Corporation
Workorder# 0304039R1

Eleven XAD VOST Tube samples were received on April 02, 2003. The laboratory performed the analysis via Modified EPA Method TO-13A using GC/MS in the full scan mode. The soxhlet extraction and extract concentration to 1.0mL were performed via modified method 3540. See the data sheets for the reporting limits for each compound. Duplicate extraction cannot be performed on PUF/XAD2 media, therefore duplicate results are derived from analyzing the extract twice.

Requirement	*TO-13A*	*ATL Modifications*
Extraction Solvent	Use of PUF only requires use of 10% ether in hexane; separate extraction of filter in DCM. Use of XAD only requires use of DCM; extract filter with XAD.	Use PUF/XAD-2 cartridge; extract cartridge + filter together in DCM.
Glassware Cleaning	Cleaning series consisting of rinsing glassware with last solvent, acetone, hexane, water/detergent, DI H2O, muffle furnace @400 deg for 4 hrs.	Pre-soak in a 5 % Chem-Solv solution at least once per week, a water/detergent wash, soaking in tap water for at least 1 hr, and a DI H2O rinse. Glassware is then set to dry or rinsed with Methanol. Glassware is pre-rinsed with DCM prior to use.
Extract Cleanup	Elute extract through silica gel prior to analysis.	No clean up used, experience shows that step does not improve method performance for typical air samples.
Surrogate Concentration	1.0 ug final concentration.	50 ug final concentration for full scan, 2.0 ug for SIM.
Standard Preparation	Standards prepared in Hexane.	Standards prepared in Methylene Chloride.
Surrogate Recovery Limit	60 - 120%	50-150% for (non-PAH) surrogates that are not included in TO-13A
Sampling Volume	TO-13	Sampling volume was supplied by the client. A sample volume of 1.0 m3 was assumed for all QC samples.

Receiving Notes

Samples were not wrapped in aluminum foil and therefore came in contact with plastic shipping bags. The client was notified via the Login email that contact with plastic may cause contamination unrelated to the actual sampling event. ATL proceeded with the analysis.

Analytical Notes

There were no analytical discrepancies.

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak

displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

The client requested an abbreviated target analyte list. The associated LCS's were spiked with representative compounds as per the method.

THE WORKORDER WAS REISSUED ON 04/15/03 TO REPORT THE DUPLICATE ANALYSIS OF SAMPLE SVP-1-SG-040103 AND AMEND THE SURROGATE METHOD LIMITS FOR THE LCS.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
E - Exceeds instrument calibration range.
Q - Exceeds quality control limits.
S - Saturated peak.
J - Estimated value.
B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
U - Compound analyzed for but not detected above the reporting limit.
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

SAMPLE NAME: SVP-1-SG-040103

ID#: 0304039R1-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040922**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/9/03**
		Date of Extraction:	**4/4/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	86	50-150
Phenol-d5	89	50-150
Nitrobenzene-d5	84	50-150
2-Fluorobiphenyl	83	60-120
2,4,6-Tribromophenol	92	50-150
Terphenyl-d14	91	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-1-SG-040103 Duplicate

ID#: 0304039R1-01AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040923**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/9/03**
		Date of Extraction:	**4/4/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	86	50-150
Phenol-d5	91	50-150
Nitrobenzene-d5	84	50-150
2-Fluorobiphenyl	82	60-120
2,4,6-Tribromophenol	91	50-150
Terphenyl-d14	92	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-2-SG-040103

ID#: 0304039R1-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040924**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/9/03**
		Date of Extraction:	**4/4/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	72	50-150
Phenol-d5	79	50-150
Nitrobenzene-d5	70	50-150
2-Fluorobiphenyl	73	60-120
2,4,6-Tribromophenol	85	50-150
Terphenyl-d14	85	60-120

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SAMPLE NAME: SVP-3-SG-040103

ID#: 0304039R1-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040925**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/9/03**
		Date of Extraction:	**4/4/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	89	50-150
Phenol-d5	96	50-150
Nitrobenzene-d5	87	50-150
2-Fluorobiphenyl	83	60-120
2,4,6-Tribromophenol	97	50-150
Terphenyl-d14	96	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-4-SG-040103

ID#: 0304039R1-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040926**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/10/03**
		Date of Extraction:	**4/4/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	82	50-150
Phenol-d5	87	50-150
Nitrobenzene-d5	78	50-150
2-Fluorobiphenyl	79	60-120
2,4,6-Tribromophenol	85	50-150
Terphenyl-d14	88	60-120

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SAMPLE NAME: SVP-5-SG-040103

ID#: 0304039R1-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040927**	**Date of Collection: 4/1/03**
Dil. Factor:	**1.00**	**Date of Analysis: 4/10/03**
		Date of Extraction: 4/4/03

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	88	50-150
Phenol-d5	93	50-150
Nitrobenzene-d5	88	50-150
2-Fluorobiphenyl	87	60-120
2,4,6-Tribromophenol	95	50-150
Terphenyl-d14	96	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-14-SG-040103

ID#: 0304039R1-06A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040928**	**Date of Collection: 4/1/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/10/03**	
		Date of Extraction: 4/4/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	8.6

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	104	50-150
Phenol-d5	97	50-150
Nitrobenzene-d5	96	50-150
2-Fluorobiphenyl	92	60-120
2,4,6-Tribromophenol	94	50-150
Terphenyl-d14	99	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-17-SG-040103

ID#: 0304039R1-07A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040929r1**	**Date of Collection: 4/1/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/10/03**	
		Date of Extraction: 4/4/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	70	50-150
Phenol-d5	76	50-150
Nitrobenzene-d5	68	50-150
2-Fluorobiphenyl	71	60-120
2,4,6-Tribromophenol	77	50-150
Terphenyl-d14	82	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-140-SG-040103

ID#: 0304039R1-08A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040930**	**Date of Collection: 4/1/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/10/03**	
		Date of Extraction: 4/4/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	6.4

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	103	50-150
Phenol-d5	101	50-150
Nitrobenzene-d5	98	50-150
2-Fluorobiphenyl	91	60-120
2,4,6-Tribromophenol	104	50-150
Terphenyl-d14	100	60-120

AIR TOXICS LTD.

SAMPLE NAME: Background Air Sample 040103-AM

ID#: 0304039R1-09A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040931**	**Date of Collection:**	**4/1/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/10/03**
		Date of Extraction:	**4/4/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	85	50-150
Phenol-d5	93	50-150
Nitrobenzene-d5	86	50-150
2-Fluorobiphenyl	84	60-120
2,4,6-Tribromophenol	95	50-150
Terphenyl-d14	91	60-120

AIR TOXICS LTD.

SAMPLE NAME: Background Air Sample 040103-PM

ID#: 0304039R1-10A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040932**	**Date of Collection: 4/1/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/10/03**	
		Date of Extraction: 4/4/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	*CAS Number*	*Match Quality*	Amount *(ug)*
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	*%Recovery*	**Method** *Limits*
2-Fluorophenol	74	50-150
Phenol-d5	80	50-150
Nitrobenzene-d5	75	50-150
2-Fluorobiphenyl	74	60-120
2,4,6-Tribromophenol	81	50-150
Terphenyl-d14	84	60-120

AIR TOXICS LTD.

SAMPLE NAME: Trip Blank 040103

ID#: 0304039R1-11A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k041004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/10/03**	
		Date of Extraction: 4/4/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	83	50-150
Phenol-d5	87	50-150
Nitrobenzene-d5	83	50-150
2-Fluorobiphenyl	80	60-120
2,4,6-Tribromophenol	86	50-150
Terphenyl-d14	92	60-120

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0304039R1-12A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040920**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/9/03**	
		Date of Extraction: 4/4/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
2-Fluorophenol	74	50-150
Phenol-d5	79	50-150
Nitrobenzene-d5	75	50-150
2-Fluorobiphenyl	71	60-120
2,4,6-Tribromophenol	81	50-150
Terphenyl-d14	82	60-120

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0304039R1-13A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040921**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 4/9/03**
		Date of Extraction: 4/4/03

Compound	%Recovery
Phenol	64
2-Chlorophenol	66
1,4-Dichlorobenzene	64
N-Nitroso-di-n-propylamine	72
1,2,4-Trichlorobenzene	67
4-Chloro-3-methylphenol	76
Acenaphthene	68
4-Nitrophenol	61
2,4-Dinitrotoluene	68
Pentachlorophenol	61
Pyrene	70

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
2-Fluorophenol	60	50-150
Phenol-d5	63	50-150
Nitrobenzene-d5	66	50-150
2-Fluorobiphenyl	66	60-120
2,4,6-Tribromophenol	79	50-150
Terphenyl-d14	75	60-120

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Mike Sanger
Company: TRC ENVIRONMENTAL
Address: 5 WATERSIDE CROSSING City: WINDSOR State: CT Zip: 06095
Phone: (860) 298-6234 FAX: (860) 298-6399
Collected By: Signature: Kati Laurich

Project info:
P.O. #
Project #: 39152
Project Name: Santa Susana

Turn Around Time:
☐ Normal
☑ Rush SEE NOTES
Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Pickup Calibration Start / Finish	Canister Pressure / Vacuum Initial (Sample Time)	Final (Finish Time)	Receipt (Receipt Time)
01A	SVP-1-SG-040103	4/1/03 1604	TO-13	150.4 / 150.7	13-19	1604	135
02A	SVP-2-SG-040103	4/1/03 1350	TO-13	150.5 ~ 153.9	1135	1350	135
03A	SVP-3-SG-040103	4/1/03 1401	TO-13	150.0 ~ 157.7	1146	1401	135
04A	SVP-4-SG-040103	4/1/03 1400	TO-13	149.2 - 155.9	1145	1400	135
05A	SVP-5-SG-040103	4/1/03 1141	TO-13	149.5 ~ 151.2	0926	1141	135
06A	SVP-14-SG-040103	4/1/03 1349	TO-13	75.29 ~ ~~75.84~~ (dup) 76.71	0914	1349	270
07A	SVP-17-SG-040103	4/1/03 1207	TO-13	149.1 ~ 151.9	0952	1207	135
08A	SVP-18-SG-040103	4/1/03 1349	TO-13	75.89 ~ 76.20	0919	1349	270
09A	Background Air Sample 040103-AM	4/1/03 1124	TO-13	149.2 ~ 155.1	0909	1124	135
10A	Background Air Sample 040103-PM	4/1/03 1501	TO-13	149.1 ~ 151.9	1246	1501	135

Relinquished By: (Signature) Date/Time: Kati Laurich 4/4/03 1445
Received By: (Signature) Date/Time: Lauren Thomas AL 4/7/03 9:15
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:

Notes:
48 hr TAT on analyses
Standard TAT on report (include data validation package).

Lab Use Only

Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
FedEx	8012 4826 9958	JL	3.4	Good	(Yes) No None	03040389

Form TOC rev. 3L

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CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Mike Sarsca
Company: TRC Environmental
Address: 5 Waterside Crossing City: Windsor State: CT Zip: 06095
Phone: (860) 298-6234 FAX: (860) 298-6399
Collected By: (Signature) Kate Cauvet

Project Info:
P.O. #
Project #: 38182
Project Name: Stuhr/Swigert

Turn Around Time:
☐ Normal
☒ Rush: SEE NOTES (Specify)

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum: Initial	Final	Receipt
11A	Trip Blank 040103	4/1/03 - 1415	TO-13 Only analytes list previously submitted	—	—	

Relinquished By: (Signature) Date/Time: Kate Cauvet 4/1/03 1445
Received By: (Signature) Date/Time: Kenneth Thomas 4/1/03
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:

Notes:
48 hr TAT on analysis
Standard TAT on report (include data validation package).

Lab Use Only

Shipper Name	AirBill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
FedEx	8397 4836 9393	DD	3.4	Good	(Yes) No None	0304039

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Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

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E-mail to:samplereceiving@airtoxics.com

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0304006

Work Order Summary

CLIENT:	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095	**BILL TO:**	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095
PHONE:	860-298-6300	**P.O. #**	
FAX:		**PROJECT #**	38182 Solutia/Sauget
DATE RECEIVED:	4/1/03	**CONTACT:**	Betty Chu
DATE COMPLETED:	4/14/03		

FRACTION #	NAME	TEST
01A	SVP-16-SG-033103	Modified TO-13A/TIC
02A	SVP-12-SG-033103	Modified TO-13A/TIC
03A	SVP-15-SG-033103	Modified TO-13A/TIC
04A	SVP-8-SG-033103	Modified TO-13A/TIC
05A	SVP-11-SG-033103	Modified TO-13A/TIC
06A	SVP-10-SG-033103	Modified TO-13A/TIC
07A	SVP-100-SG-033103	Modified TO-13A/TIC
08A	SVP-6-SG-033103	Modified TO-13A/TIC
09A	SVP-9-SG-033103	Modified TO-13A/TIC
09AA	SVP-9-SG-033103 Duplicate	Modified TO-13A/TIC
10A	Background Sample 033103	Modified TO-13A/TIC
11A	BBZ-Office-01	Modified TO-13A/TIC
12A	BBZ-Intake-02	Modified TO-13A/TIC
13A	BBG-Office-03	Modified TO-13A/TIC
14A	BBG-Intake-04	Modified TO-13A/TIC
15A	CCB-Office-05	Modified TO-13A/TIC
16A	CCB-Intake-06	Modified TO-13A/TIC
17A	BK-1st Fl. Office-07	Modified TO-13A/TIC
18A	BK-Intake-08	Modified TO-13A/TIC
18AA	BK-Intake-08 Duplicate	Modified TO-13A/TIC

Continued on next page

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0304006

Work Order Summary

CLIENT:	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095	**BILL TO:**	Mr. Gary Ritter TRC Environmental Corporation 5 Waterside Crossing Windsor, CT 06095
PHONE:	860-298-6300	**P.O. #**	
FAX:		**PROJECT #**	38182 Solutia/Sauget
DATE RECEIVED:	4/1/03	**CONTACT:**	Betty Chu
DATE COMPLETED:	4/14/03		

FRACTION #	NAME	TEST
19A	BK-Dist-09	Modified TO-13A/TIC
20A	BK-Dist-Duplicate-10	Modified TO-13A/TIC
21A	Blank-11	Modified TO-13A/TIC
22A	Trip Blank 033103	Modified TO-13A/TIC
23A	Lab Blank	Modified TO-13A/TIC
23B	Lab Blank	Modified TO-13A/TIC
24A	LCS	Modified TO-13A/TIC
24B	LCS	Modified TO-13A/TIC

CERTIFIED BY: Linda A. Truman DATE: 04/14/03

Laboratory Director

Certfication numbers: AR DEQ, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/02, Expiration date: 06/30/03
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-13
TRC Environmental Corporation
Workorder# 0304006

Twenty Two VOST XAD Tube samples were received on April 01, 2003. The laboratory performed the analysis via Modified EPA Method TO-13 using GC/MS in the full scan mode. The soxhlet extraction and extract concentration to 1.0mL were performed via modified method 3540. See the data sheets for the reporting limits for each compound. Duplicate extraction cannot be performed on VOST XAD Tube media, therefore duplicate results are derived from analyzing the extract twice.

Requirement	*TO-13A*	*ATL Modifications*
Extraction Solvent	Use of PUF only requires use of 10% ether in hexane; separate extraction of filter in DCM. Use of XAD only requires use of DCM; extract filter with XAD.	Use PUF/XAD-2 cartridge; extract cartridge + filter together in DCM.
Glassware Cleaning	Cleaning series consisting of rinsing glassware with last solvent, acetone, hexane, water/detergent, DI H2O, muffle furnace @400 deg for 4 hrs.	Pre-soak in a 5 % Chem-Solv solution at least once per week, a water/detergent wash, soaking in tap water for at least 1 hr, and a DI H2O rinse. Glassware is then set to dry or rinsed with Methanol. Glassware is pre-rinsed with DCM prior to use.
Extract Cleanup	Elute extract through silica gel prior to analysis.	No clean up used, experience shows that step does not improve method performance for typical air samples.
Surrogate Concentration	1.0 ug final concentration.	50 ug final concentration for full scan, 2.0 ug for SIM.
Standard Preparation	Standards prepared in Hexane.	Standards prepared in Methylene Chloride.
Surrogate Recovery Limit	60 - 120%	50-150% for (non-PAH) surrogates that are not included in TO-13A
Sampling Volume	TO-13	Sampling volume was supplied by the client. A sample volume of 1.0 m3 was assumed for all QC samples.

Receiving Notes

The chain of custody information for samples SVP-11-033103 and SVP-6-033103 did not match the entries on the sample tags. The discrepancy was noted in the Login email and the information on the chain of custody was used to process and report the samples.

VOST XAD Tube samples were not wrapped in aluminum foil and therefore came in contact with plastic shipping bags. The client was notified via the Login email that contact with plastic may cause contamination unrelated to the actual sampling event. ATL proceeded with the analysis.

A Temperature Blank was not included with the shipment. Temperature was measured on a representative sample and was not within 4 degrees C. +/- 2 degrees. Coolant in the form of ice/blue ice was not present.

The client was notified via the login fax/email and the analysis proceeded.

Analytical Notes

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

The recovery of internal standard 1,4-Dichlorobenzene-d4 in samples SVP-10-SG-033103 and SVP-100-SG-033103 was outside control limits due to matrix interferences. Dilution of the samples was required to meet method acceptance limits.

The client requested an abbreviated target analyte list. The associated LCS's were spiked with representative compounds as per the method.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
E - Exceeds instrument calibration range.
Q - Exceeds quality control limits.
S - Saturated peak.
J - Estimated value.
B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
U - Compound analyzed for but not detected above the reporting limit.
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates
as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

SAMPLE NAME: SVP-16-SG-033103

ID#: 0304006-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040406**	**Date of Collection: 3/31/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/4/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	73	50-150
Phenol-d5	78	50-150
Nitrobenzene-d5	74	50-150
2-Fluorobiphenyl	72	60-120
2,4,6-Tribromophenol	80	50-150
Terphenyl-d14	80	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-12-SG-033103

ID#: 0304006-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	y040407	Date of Collection: 3/31/03
Dil. Factor:	1.00	Date of Analysis: 4/4/03
		Date of Extraction: 4/1/03

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	76	50-150
Phenol-d5	81	50-150
Nitrobenzene-d5	76	50-150
2-Fluorobiphenyl	77	60-120
2,4,6-Tribromophenol	81	50-150
Terphenyl-d14	78	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-15-SG-033103

ID#: 0304006-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040408**	**Date of Collection: 3/31/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/4/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	76	50-150
Phenol-d5	79	50-150
Nitrobenzene-d5	74	50-150
2-Fluorobiphenyl	73	60-120
2,4,6-Tribromophenol	79	50-150
Terphenyl-d14	83	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-8-SG-033103

ID#: 0304006-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040409**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/4/03**
		Date of Extraction:	**4/1/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	79	50-150
Phenol-d5	83	50-150
Nitrobenzene-d5	78	50-150
2-Fluorobiphenyl	76	60-120
2,4,6-Tribromophenol	77	50-150
Terphenyl-d14	77	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-11-SG-033103

ID#: 0304006-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040410**	**Date of Collection: 3/31/03**
Dil. Factor:	**1.00**	**Date of Analysis: 4/4/03**
		Date of Extraction: 4/1/03

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-N trochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	81	50-150
Phenol-d5	86	50-150
Nitrobenzene-d5	79	50-150
2-Fluorobiphenyl	78	60-120
2,4,6-Tribromophenol	87	50-150
Terphenyl-d14	85	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-10-SG-033103

ID#: 0304006-06A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040710**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**2.00**	**Date of Analysis:**	**4/7/03**
		Date of Extraction:	**4/1/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	10	Not Detected
2-Chlorophenol	10	Not Detected
Nitrobenzene	2.0	Not Detected
2,4-Dichlorophenol	10	Not Detected
2,4,5-Trichlorophenol	10	Not Detected
2,4,6-Trichlorophenol	10	Not Detected
4-Chloroaniline	20	Not Detected
Pentachlorophenol	40	Not Detected
Aniline	2.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	59	50-150
Phenol-d5	63	50-150
Nitrobenzene-d5	83	50-150
2-Fluorobiphenyl	86	60-120
2,4,6-Tribromophenol	94	50-150
Terphenyl-d14	96	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-100-SG-033103

ID#: 0304006-07A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040711**	**Date of Collection: 3/31/03**	
Dil. Factor:	**2.00**	**Date of Analysis: 4/7/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	10	Not Detected
2-Chlorophenol	10	Not Detected
Nitrobenzene	2.0	Not Detected
2,4-Dichlorophenol	10	Not Detected
2,4,5-Trichlorophenol	10	Not Detected
2,4,6-Trichlorophenol	10	Not Detected
4-Chloroaniline	20	Not Detected
Pentachlorophenol	40	Not Detected
Aniline	2.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	55	50-150
Phenol-d5	60	50-150
Nitrobenzene-d5	76	50-150
2-Fluorobiphenyl	83	60-120
2,4,6-Tribromophenol	87	50-150
Terphenyl-d14	97	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-6-SG-033103

ID#: 0304006-08A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	y040413	Date of Collection:	3/31/03
Dil. Factor:	1.00	Date of Analysis:	4/4/03
		Date of Extraction:	4/1/03

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	70	50-150
Phenol-d5	76	50-150
Nitrobenzene-d5	69	50-150
2-Fluorobiphenyl	71	60-120
2,4,6-Tribromophenol	80	50-150
Terphenyl-d14	81	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-9-SG-033103

ID#: 0304006-09A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040414**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/4/03**
		Date of Extraction:	**4/1/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	80	50-150
Phenol-d5	83	50-150
Nitrobenzene-d5	74	50-150
2-Fluorobiphenyl	77	60-120
2,4,6-Tribromophenol	88	50-150
Terphenyl-d14	85	60-120

AIR TOXICS LTD.

SAMPLE NAME: SVP-9-SG-033103 Duplicate

ID#: 0304006-09AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040415**	**Date of Collection:**	**3/31/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/5/03**
		Date of Extraction:	**4/1/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-N trochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	77	50-150
Phenol-d5	82	50-150
Nitrobenzene-d5	76	50-150
2-Fluorobiphenyl	76	60-120
2,4,6-Tribromophenol	91	50-150
Terphenyl-d14	85	60-120

AIR TOXICS LTD.

SAMPLE NAME: Background Sample 033103

ID#: 0304006-10A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040416**	**Date of Collection: 3/31/03**
Dil. Factor:	**1.00**	**Date of Analysis: 4/5/03**
		Date of Extraction: 4/1/03

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	66	50-150
Phenol-d5	69	50-150
Nitrobenzene-d5	61	50-150
2-Fluorobiphenyl	65	60-120
2,4,6-Tribromophenol	72	50-150
Terphenyl-d14	70	60-120

AIR TOXICS LTD.

SAMPLE NAME: BBZ-Office-01

ID#: 0304006-11A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040417**	**Date of Collection: 3/29/03**
Dil. Factor:	**1.00**	**Date of Analysis: 4/5/03**
		Date of Extraction: 4/1/03

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	71	50-150
Phenol-d5	75	50-150
Nitrobenzene-d5	69	50-150
2-Fluorobiphenyl	71	60-120
2,4,6-Tribromophenol	82	50-150
Terphenyl-d14	79	60-120

AIR TOXICS LTD.

SAMPLE NAME: BBZ-Intake-02

ID#: 0304006-12A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040717**	**Date of Collection: 3/29/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/7/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	82	50-150
Phenol-d5	87	50-150
Nitrobenzene-d5	81	50-150
2-Fluorobiphenyl	80	60-120
2,4,6-Tribromophenol	98	50-150
Terphenyl-d14	91	60-120

AIR TOXICS LTD.

SAMPLE NAME: BBG-Office-03

ID#: 0304006-13A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040718**	**Date of Collection: 3/29/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/7/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	84	50-150
Phenol-d5	89	50-150
Nitrobenzene-d5	85	50-150
2-Fluorobiphenyl	85	60-120
2,4,6-Tribromophenol	101	50-150
Terphenyl-d14	90	60-120

AIR TOXICS LTD.

SAMPLE NAME: BBG-Intake-04

ID#: 0304006-14A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040719**	**Date of Collection: 3/29/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/7/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	66	50-150
Phenol-d5	70	50-150
Nitrobenzene-d5	65	50-150
2-Fluorobiphenyl	68	60-120
2,4,6-Tribromophenol	90	50-150
Terphenyl-d14	87	60-120

AIR TOXICS LTD.

SAMPLE NAME: CCB-Office-05

ID#: 0304006-15A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040720**	**Date of Collection: 3/29/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/7/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	82	50-150
Phenol-d5	85	50-150
Nitrobenzene-d5	80	50-150
2-Fluorobiphenyl	81	60-120
2,4,6-Tribromophenol	96	50-150
Terphenyl-d14	89	60-120

AIR TOXICS LTD.

SAMPLE NAME: CCB-Intake-06

ID#: 0304006-16A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040721**	**Date of Collection:**	**3/29/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/7/03**
		Date of Extraction:	**4/1/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	76	50-150
Phenol-d5	80	50-150
Nitrobenzene-d5	75	50-150
2-Fluorobiphenyl	75	60-120
2,4,6-Tribromophenol	99	50-150
Terphenyl-d14	91	60-120

AIR TOXICS LTD.

SAMPLE NAME: BK-1st Fl. Office-07

ID#: 0304006-17A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040722**	**Date of Collection: 3/29/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/7/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	78	50-150
Phenol-d5	82	50-150
Nitrobenzene-d5	76	50-150
2-Fluorobiphenyl	77	60-120
2,4,6-Tribromophenol	99	50-150
Terphenyl-d14	88	60-120

AIR TOXICS LTD.

SAMPLE NAME: BK-Intake-08

ID#: 0304006-18A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040723**	**Date of Collection: 3/29/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/7/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	80	50-150
Phenol-d5	85	50-150
Nitrobenzene-d5	81	50-150
2-Fluorobiphenyl	79	60-120
2,4,6-Tribromophenol	99	50-150
Terphenyl-d14	93	60-120

AIR TOXICS LTD.

SAMPLE NAME: BK-Intake-08 Duplicate

ID#: 0304006-18AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040724**	**Date of Collection: 3/29/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/7/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	81	50-150
Phenol-d5	85	50-150
Nitrobenzene-d5	80	50-150
2-Fluorobiphenyl	79	60-120
2,4,6-Tribromophenol	99	50-150
Terphenyl-d14	91	60-120

AIR TOXICS LTD.

SAMPLE NAME: BK-Dist-09

ID#: 0304006-19A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040808**	**Date of Collection: 3/29/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/8/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	64	50-150
Phenol-d5	66	50-150
Nitrobenzene-d5	61	50-150
2-Fluorobiphenyl	69	60-120
2,4,6-Tribromophenol	82	50-150
Terphenyl-d14	94	60-120

AIR TOXICS LTD.

SAMPLE NAME: BK-Dist-Duplicate-10

ID#: 0304006-20A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040809**	**Date of Collection:**	**3/29/03**
Dil. Factor:	**1.00**	**Date of Analysis:**	**4/8/03**
		Date of Extraction:	**4/1/03**

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	53	50-150
Phenol-d5	63	50-150
Nitrobenzene-d5	52	50-150
2-Fluorobiphenyl	64	60-120
2,4,6-Tribromophenol	77	50-150
Terphenyl-d14	87	60-120

AIR TOXICS LTD.

SAMPLE NAME: Blank-11

ID#: 0304006-21A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	k040810	Date of Collection: 3/29/03
Dil. Factor:	1.00	Date of Analysis: 4/8/03
		Date of Extraction: 4/1/03

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	71	50-150
Phenol-d5	74	50-150
Nitrobenzene-d5	68	50-150
2-Fluorobiphenyl	73	60-120
2,4,6-Tribromophenol	83	50-150
Terphenyl-d14	91	60-120

AIR TOXICS LTD.

SAMPLE NAME: Trip Blank 033103

ID#: 0304006-22A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040811**	**Date of Collection: 3/31/03**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/8/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: XAD Tube: VOST

Surrogates	%Recovery	Method Limits
2-Fluorophenol	70	50-150
Phenol-d5	75	50-150
Nitrobenzene-d5	69	50-150
2-Fluorobiphenyl	77	60-120
2,4,6-Tribromophenol	80	50-150
Terphenyl-d14	92	60-120

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0304006-23A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/4/03**	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
2-Fluorophenol	77	50-150
Phenol-d5	78	50-150
Nitrobenzene-d5	74	50-150
2-Fluorobiphenyl	72	60-120
2,4,6-Tribromophenol	67	50-150
Terphenyl-d14	74	60-120

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0304006-23B

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	k040806	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 4/8/03	
		Date of Extraction: 4/1/03	

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
2-Chlorophenol	5.0	Not Detected
Nitrobenzene	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
4-Chloroaniline	10	Not Detected
Pentachlorophenol	20	Not Detected
Aniline	1.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ug)
4-Nitrochlorobenzene	100-00-5	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
2-Fluorophenol	80	50-150
Phenol-d5	84	50-150
Nitrobenzene-d5	79	50-150
2-Fluorobiphenyl	79	60-120
2,4,6-Tribromophenol	80	50-150
Terphenyl-d14	93	60-120

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0304006-24A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**y040405**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 4/4/03**
		Date of Extraction: 4/1/03

Compound	%Recovery
Phenol	74
2-Chlorophenol	75
1,4-Dichlorobenzene	70
N-Nitroso-di-n-propylamine	70
1,2,4-Trichlorobenzene	75
4-Chloro-3-methylphenol	78
Acenaphthene	75
4-Nitrophenol	65
2,4-Dinitrotoluene	68
Pentachlorophenol	61
Pyrene	75

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
2-Fluorophenol	70	50-150
Phenol-d5	73	50-150
Nitrobenzene-d5	77	50-150
2-Fluorobiphenyl	77	60-120
2,4,6-Tribromophenol	79	50-150
Terphenyl-d14	77	60-120

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0304006-24B

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	**k040807**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 4/8/03**
		Date of Extraction: 4/1/03

Compound	%Recovery
Phenol	69
2-Chlorophenol	68
1,4-Dichlorobenzene	64
N-Nitroso-di-n-propylamine	90
1,2,4-Trichlorobenzene	79
4-Chloro-3-methylphenol	85
Acenaphthene	78
4-Nitrophenol	67
2,4-Dinitrotoluene	77
Pentachlorophenol	73
Pyrene	90

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
2-Fluorophenol	59	50-150
Phenol-d5	70	50-150
Nitrobenzene-d5	78	50-150
2-Fluorobiphenyl	79	60-120
2,4,6-Tribromophenol	92	50-150
Terphenyl-d14	96	60-120

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AN ENVIRONMENTAL ANALYTICAL LABORATORY
180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

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Contact: Person: Mike Sacca
Company: IRC Environmental
Address: 5 Waterside Crossing City: Windsor State: CT Zip: 06095
Phone: (860) 298-6254 FAX: (860) 298-8399
Collected By: (Signature) Kate Launiet

Project Info:
P.O. #:
Project #: 38182
Project Name: Shelton/Search

Turn Around Time:
☐ Normal
☒ Rush SEE NOTES
Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum (cc/min) Initial (Start / Finish)	Final (Start / Finish)	Receipt (Receipt / Finish)
01A	SVP-10-SG-033103	3/31/03 ~ 1237	TO-13	148.5 / 145.3	1022	1237	135
02A	SVP-12-SG-033103	3/31/03 ~ 1258	TO-13	149.9 / 150.7	1043	1258	135
03A	SVP-13-SG-033103	3/31/03 ~ 1404	TO-13	150.2 / 149.8	1149	1404	135
04A	SVP-8-SG-033103	3/31/03 ~ 1415	TO-13	150.2 / 149.8	1200	1415	135
05A	SVP-11-SG-033103	3/31/03 ~ 1805	TO-13	148.5 / 145.3	1550	1805	135
06A	SVP-10-SG-033103	3/31/03 ~ 1442 1851	TO-13	74.81 / 77.15	1421	1851	270
07A	SVP-100-SG-033103	3/31/03 ~ 1851	TO-13	75.75 / 76.35	1421	1851	270
08A	SVP-6-SG-033103	3/31/03 ~ 1745	TO-13	150.2 / 149.8	1530	1745	135
09A	SVP-9-SG-033103	3/31/03 ~ 1805	TO-13	154.4 / 154.4	1550	1805	135
10A	Background Sample 033103	3/31/03 ~ 1807	TO-13	150.5 / 153.3	1552	1807	135

Relinquished By: (Signature) Date/Time: Kate Launiet 3/31/03
Received By: (Signature) Date/Time: Lynn Lomax ATL 4/1/03 9:15
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:

Notes: 48 hr TAT on analytes
Standard TAT on report
* TO-13 refer to analyte list previously submitted.

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	793455073530	JJ	Ambient	Acceptable	(Yes) No None	0304006

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person: Gary Ritter
Company: TRC
Address: 5 Waterside Crossing City: Windsor State: CT Zip: 06095
Phone: 860-298-6256 FAX: 860-298-6380
Collected By: (Signature) Dennis P. Ryder

Project Info:
P.O. #:
Project #: 38182
Project Name: Solutia

Turn Around Time:
☐ Normal
☒ Rush ____ Specify

Times

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Start / Finish Flow rate/cc/min	Canister Pressure/Vacuum Initial	Final	Barcode
11A	BBZ-Office-01	3/29/03	TO13	40.01 / 39.32	13:36	21:58	502
12A	BBZ-Intake-02			40.25 / 40.18	13:30	21:53	503
13A	BBG-Office-03			40.67 / 40.11	13:16	21:29	493
14A	BBG-Intake-04			40.28 / 40.50	13:21	21:34	493
15A	CCB-Office-05			40.87 / 40.16	13:08	21:16	488
16A	CCB-Intake-06			40.35 / 40.07	12:39	21:11	512
17A	BK-1st Fl. Office-07			40.48 / 41.71	12:08	20:16	487
18A	BK-Intake-08			41.27 / 40.75	12:30	20:55	505
19A	BK-Dist-09			39.98 / 40.00	12:19	20:32	493
~~20A~~ 20A	BK-Dist-Duplicate-10			39.86 / 39.67	12:20	20:37	497
21A	Blank-11						

Relinquished By: (Signature) Date/Time: Dennis P. Ryder 3/31/03 09:00
Received By: (Signature) Date/Time: Caldwell FTC 4/1/03 930
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:

Notes: Sample: BK-Dist-Duplicate-10
Tip of sampling tube broke off during sampling.

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	802462232	AA	44	Ambient	Yes / No / (None)	0304006
					Questionable		

Form 2259 rev. 05

4/1/03

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CHAIN-OF-CUSTODY RECORD

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Contact Person Mike Susca
Company TRC Environmental
Address 5 Waterside Crossing City Windsor State CT Zip 06095
Phone (860)298-6234 FAX (860)298-6399
Collected By: Signature Kate Lauriat

Project Info:
P.O. #
Project # 33182
Project Name Southern/Sargent

Turn Around Time:
☐ Normal
☒ Rush ______ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
~~01A~~ 22A	Trip Blank 033103	3/31/03 1830	TO-15 refer to analytes list already submitted	NA	NA	NA
~~02A~~ 21A	Trip Blank 033103	3/31/03 1835	TO-13 " "	NA	NA	NA

jg 4/1/03

Relinquished By: (Signature) Date/Time	Received By: (Signature) Date/Time
Kate Lauriat 3/31/03 1830	
	Tami Ruiz ATL 4/1/03 920

Notes:
48 hr TAT for analysis
Standard TAT for report

0304006

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	8344 1604 2502	TP	—	———	(Yes) No None	~~0304003~~

Ambient Questionable

jg 4/1/03

Form 1293 rev. 09

jg 4/1/03

BOX 88AH31

2474-F41	Florida Power
2474-F61	Florida Power
Eh	Vendros Related Services
Ei	Professional Activities
Ej	Nuclear Relaed Regulations
	Model Evaluation & development
	Exhibit for deposition - W.Kawaters

Attachment D

WGK Excavation Procedure

Purpose

The purpose of this procedure is to specify minimum rules and requirements to ensure the safety and health of all personnel at the W.G. Krummrich Plant, including Solutia and contractor employees, visitors and the surrounding community.

Policy

An Excavation Permit will be executed prior to the start of any excavation of any depth by anyone for any purpose. An Excavation Permit will also cover the driving of grounding rods or any other object into the ground and the installation of auger cast piling.

Scope

This procedure sets forth guidance for those individuals at the W. G. Krummrich Plant who may have projects that require excavation as defined by this procedure.

References

W. G. Krummrich Excavation Permit

Attachments

Excavation Permit

Definitions

The following definition is important.

Term	Meaning
Excavation	For purposes of this procedure, excavation will be defined as the any activity that results in the disturbance, displacement or removal of the substrate at any depth for any reason. Also included in this definition is the driving of grounding rods, piles and the use of certain push technologies for the purposes of soil, geologic or groundwater testing. The installation of auger cast piling is also covered by this procedure.

Contents

Regulatory Classification

Revisions, Review and Approval

Introduction

The ESH Department has developed the following procedure which requires engineers and CMRs to evaluate the site that is to be excavated to minimize any potential hazards that may be associated with excavation at that site. The site must be evaluated for underground utilities, overhead clearance and potential health concerns from contact with contaminated soils.

Responsibilities

The following describes the responsibilities of various personnel involved with this procedure.

Title	Responsibility
Engineering	On project work, Solutia personnel responsible for design shall indicate on construction drawings all nearby underground utilities or service lines, or any other potential obstructions where excavation is required. The plant's Maintenance Group and Environmental Safety and Health (ESH) Group should be consulted during the design process.
Planner/First Line Supervisor	On non-project work, the Planner or First Line Supervisor will review all applicable plant utility reference drawings and perform a field check prior to initiating an excavation permit. The Planner / First Line Supervisor will also consult with the ESH Department to determine if there is any potential for contact with contaminated soils
Maintenance Department	The Maintenance Department will be consulted regarding underground utilities prior to the start of any excavation.
Environmental, Safety & Health Department Personnel	ESH personnel will be consulted regarding any environmental or human health concerns prior to the start of any excavation. ESH personnel will also assist in determining the level of personal protection equipment when there is a potential for contact with contaminated soils.

Procedure

Permit Initiation

The individual responsible for the excavation must evaluate the site that is to

be excavated with regards to underground utilities, overhead clearance and the potential contact with contaminated soils.

The underground utility and overhead clearance evaluation can be completed by reviewing the plant utility drawings and department equipment drawings respectively.

A field check of the area that is to be excavated should also be conducted.

The Maintenance Department should be consulted if there any questions regarding underground utilities.

The ESH Department should be consulted to determine the potential for contact with impacted soils.

ESH Department personnel will:

- Review historical plant drawings to determine if any manufacturing activities took place at the site to be excavated.
- Review historical plant drawings to determine if the area to be excavated is a current or former solid waste management unit, hazardous waste management unit, or area of concern.
- Review available soil sampling data to determine if and what type of contamination exists.

The ESH Department will use this data to determine the level of personnel protection that will be used during the excavation.

Permit Requirements

An Excavation Permit will be issued prior to the start of any excavation of any depth by anyone for any purpose.

The Maintenance and ESH Departments must be notified prior to beginning any excavation.

In no case shall a permit be in use for a period of greater than seven successive shifts or calendar days. The permit must be issued in advance for this period or the original date may be extended by the supervisor responsible for the work.

All permits for excavation in manufacturing areas must be approved by department supervision and the supervisor responsible for the excavation. All permits for work outside of the manufacturing areas need to be approved only by the maintenance group.

The person responsible for the excavation will make a review of all applicable drawings, field checks and notifications to the Maintenance and ESH Departments. The Maintenance Department shall note any special precautions that are to be taken during the excavation. The ESH Department shall determine the level of personnel protection and any special disposal

requirements.

The permit shall be securely fixed at a point immediately adjacent to the excavation and shall be clearly visible at all times. A valid permit must be displayed from the start of excavation through the completion of all activities associated with that excavation.

The responsible person shall inspect the job site each day/shift the permit is in effect and validate that inspection signature. The inspection should:

- Determine if conditions at the excavated site have changed due to climatic conditions.
- Determine if all permit conditions (personal monitoring, etc) are being met.
- In excavations which individuals may be required to enter, determine compliance with the following:
    - Excavations deeper than five feet must be properly shored, sloped or shielded (trench boxes).
    - Excavations deeper than four feet require a ladder or steps for exit.
    - Excavated material must be stored at least two feet from the edge of the excavation.

All excavation permits are to be returned to the ESH Department by the person responsible for the excavation upon completion of the job.

The ESH Department shall review the permits for correctness and completeness.

Complete signatures must be used in every case; not initials.

Regulatory Reference

The following reference can be used for more regarding OSHA compliance and excavations.

- 29 CFR 1926 Subpart P .650

Revisions, Review and Approval

Revision List

The following table shows the recent revision history of this document

Date	Text Affected
6/92	Initial development and issue
6/95	First review and revision.
7/03	Second review and complete revision.

Review and Approval

Author: Bob Hiller, Environmental Specialist Date

Review: Mark Peal, ESH Lead Date

Approval: Jerry Lebold, Plant Manager Date

Attachment E

Gravel Survey Report

SUMMARY REPORT

SURFICIAL GRAVEL THICKNESS SURVEY

SOLUTIA INC. W.G. KRUMMRICH FACILITY SAUGET, ILLINOIS

Prepared for
Solutia Inc.
500 Monsanto Avenue
Sauget, Illinois 62959

January 24, 2003

URS Corporation
2318 Millpark Drive
Maryland Heights, MO 63043
(314) 429-0100
Project #21561197.00002

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On January 14 through 17, 2003, URS Corporation (URS) personnel performed a surficial gravel thickness survey (survey) at Solutia's W.G. Krummrich facility (Facility) located in Sauget, Illinois. The survey was performed as part of the Resource Conservation and Recovery Act (RCRA) Human Health Environmental Indicators (HHEI) study being performed for the Facility. The survey was designed to provide a representation of the approximate thickness of surface gravel as identified on the "Surface Cover Map" dated December 10, 2002 prepared for Solutia by URS (Surface Cover Map).

The Facility[1] was divided into a 200-foot by 200-foot grid (see Figure 1) prior to commencement of the field investigation. Individual grid points were identified by their location on a vertical and horizontal axis. Letters A through O identify the horizontal axis location while numbers 1 through 16 identify the vertical axis location. Grid points were located in the field by using a measuring wheel to measure the distance between points and site features or by visually locating the points relative to Facility features. Grid points located within the gravel areas as identified on the Surface Cover Map were then investigated by subsurface methods to determine the approximate gravel thickness at these points. Grid points located within roadways, railroad right-of-ways or underground utility corridors were offset to surrounding gravel areas so that thickness of gravel could be investigated as near as feasible to the proposed locations. In addition, grid points that were located slightly within the footprint of structures or paved areas were also offset into the surrounding gravel areas and investigated. Grid points within the footprint of structures or paved areas which were greater than approximately 50 feet from surrounding gravel areas were not offset and additional subsurface investigation was not performed at these locations. Based on the above criteria, a total of 81 locations were evaluated.

Subsurface investigation at the approximate location of each applicable grid point was performed by the use of a hand-held rotary hammer utilizing ½-inch and 1-inch diameter drill bits. The drill bit was advanced to the bottom of gravel, refusal or 24 inches below ground surface, whichever occurred first. The thickness of gravel at each boring location was measured and recorded. The boring location was then identified with Universal Transverse Mercator (UTM) coordinates by the use of a hand-held Global Positioning System (GPS) unit. Slight variations of each boring location compared to the planned location as identified on the grid system are a result of offsetting the boring because of the previously listed circumstances or due to the accuracy of the measuring system. Each borehole was backfilled with the materials removed from the hole during drilling and the surface was smoothed to match surrounding grade.

UTM coordinates, thickness of gravel, total depth drilled, type of surficial gravel and underlying subsurface materials at each boring location are identified in Table 1.

[1] The work was performed in the main Facility property and did not include ancillary properties, i.e., Lot F and the Riverfront Terminal.

Gravel thickness at the Facility ranges from one-half inch to greater than 24 inches. Gravel thickness measurements are identified on Figure 1 and Table 1. An isopach map showing estimated gravel thickness throughout the entire Facility can be viewed in Figure 2. The actual thickness of gravel at boring locations having a total thickness of equal to or less than 24 inches is identified, whereas locations having gravel greater than 24 inches are only identified as greater than 24 inches.

"Surface Cover Map" dated December 10, 2002 prepared for Solutia by URS.

Table 1
Surficial Gravel Thickness Survey Results
Solutia Inc.
W.G. Krummrich Facility
Sauget, Illinois

Grid Location		UTM Coordinate		Gravel Thickness	Total Depth	Surface Gravel Description	Media Below Gravel
X	Y	(x)	(y)	(inches)	(inches)		
A	4	746928	4276044	16	18	1-Inch minus/fines	Soil
A	13	746373	4276189	8	10	1-inch clean	Soil
A	14	746339	4276194	2	4	1-inch clean	Soil
A	15	746279	4276201	6	8	1-inch clean	Soil
A	16	746226	4276208	0.5	2	1-inch clean	Soil
B	3	746950	4275997	20	24	1-Inch minus/fines	Soil
B	4	746885	4276004	13	18	1-Inch minus/fines	Soil
B	7	746729	4276036	16	18	1-inch minus	Cinders/Soil
B	10	746551	4276101	4	6	2-inch minus	Cinders
B	11	746486	4276124	1	5	1-inch minus	Cinders
B	12	746432	4276122	>24	24	Fines	N/A
B	13	746370	4276131	>24	24	Fines	N/A
B	14	746323	4276151	10	16	Fines	Cinders
B	15	746252	4276165	17	18	Fines	Soil
C	2	746986	4275906	19	32	1-Inch minus/fines	Soil
C	3	746936	4275948	12	12	1-Inch minus/fines	Refusal
C	4	746874	4275953	16	18	1-Inch minus/fines	Soil
C	5	746813	4275941	9	18	1-inch minus	Cinders/Soil
C	6	746769	4275987	8	10	1-inch minus	Cinders/Soil
C	7	746712	4275978	16	16	1-inch minus/variable	Refusal
C	10	746535	4276020	17	18	2-inch minus	Soil
C	11	746473	4276061	>24	32	Fines	N/A
C	12	746419	4276061	18	32	Fines	Soil
C	13	746355	4276071	18-20*	32	Fines	Soil
C	14	746300	4276087	>24	32	Fines	Soil
C	15	746237	4276106	10	12	Fines	Cinders/Soil
D	1	747052	4275884	10-12*	24	1-inch clean	Soil
D	2	746989	4275882	16	18	1-Inch minus/fines	Soil
D	3	746933	4275895	17	24	1-inch minus	Soil
D	4	746868	4275885	9	18	Fines	Cinders/Soil
D	5	746840	4275915	8	18	1-inch minus/fines	Soil
D	7	746695	4275934	14-15*	18	Fines	Soil

Notes:
1. UTM denotes Universal Transverse Mercator coordinate system.
2. N/A denotes gravel extends beneath total depth of boring.
3. The gravel thicknesses are believed to be accurate to within approximately one inch.
4. *Unable to determine exact depth of interface between gravel and underlying subsurface media.

Table 1 - Continued

Grid Location		UTM Coordinate		Gravel Thickness	Total Depth	Surface Gravel Description	Media Below Gravel
X	Y	(x)	(y)	(inches)	(inches)		
D	11	746444	4275987	12	18	Fines	Soil
D	12	746414	4275999.	17	18	Fines	Soil
D	13	746339	4276031	22	32	Fines	Sand
D	14	746284	4276023	14	18	1-inch minus	Cinders
D	15	746221	4276029	19	24	Fines	Soil
D	16	746172	4276037	17	18	Fines	Soil
E	2	746974	4275797	9	12	Rock chips/compacted	Cinders/Soil
E	3	746919	4275817	18-19*	19	Rock chips/compacted	Cinders
E	4	746871	4275836	16	18	Rock chips/compacted	Cinders/Soil
E	10	746493	4275910	14	18	Fines	Soil
E	11	746433	4275923	10	15	1/4-inch minus	Soil
E	12	746380	4275949	0.5	2	1-inch minus	Soil
E	15	746221	4275960	>24	24	Fines	N/A
E	16	746157	4275982	>24	24	Fines	N/A
F	3	746921	4275768	15	18	Rock chips/compacted	Cinders/Soil
F	4	746850	4275765	11	15	Rock chips/compacted	Soil
F	5	746789	4275796	10-11*	18	1-inch clean	Soil
F	6	746727	4275827	11	18	1-inch minus	Cinders/Soil
F	10	746485	4275853	17	18	1-inch minus	Soil
F	12	746362	4275875	14	18	1-inch minus	Soil
F	13	746320	4275887	18	18	1-inch minus	Cinders/Soil
F	15	746205	4275913	>24	24	Fines	N/A
F	16	746143	4275926	>24	24	Fines	N/A
G	6	746719	4275750	9	11	1-inch minus	Soil
G	7	746645	4275745	13-14*	18	1-inch minus	Soil
G	11	746405	4275812	9	12	1-inch minus	Soil
G	12	746360	4275809	20	24	1-inch minus	N/A
H	6	746690	4275708	13	18	Rock chips/compacted	Soil
H	11	746393	4275734	9	12	1-inch minus	Soil
H	12	746345	4275770	20	32	1-inch minus	Soil
I	11	746377	4275697	4	6	1-inch minus	Soil
I	12	746327	4275697	6-9*	18	1-inch minus	Soil

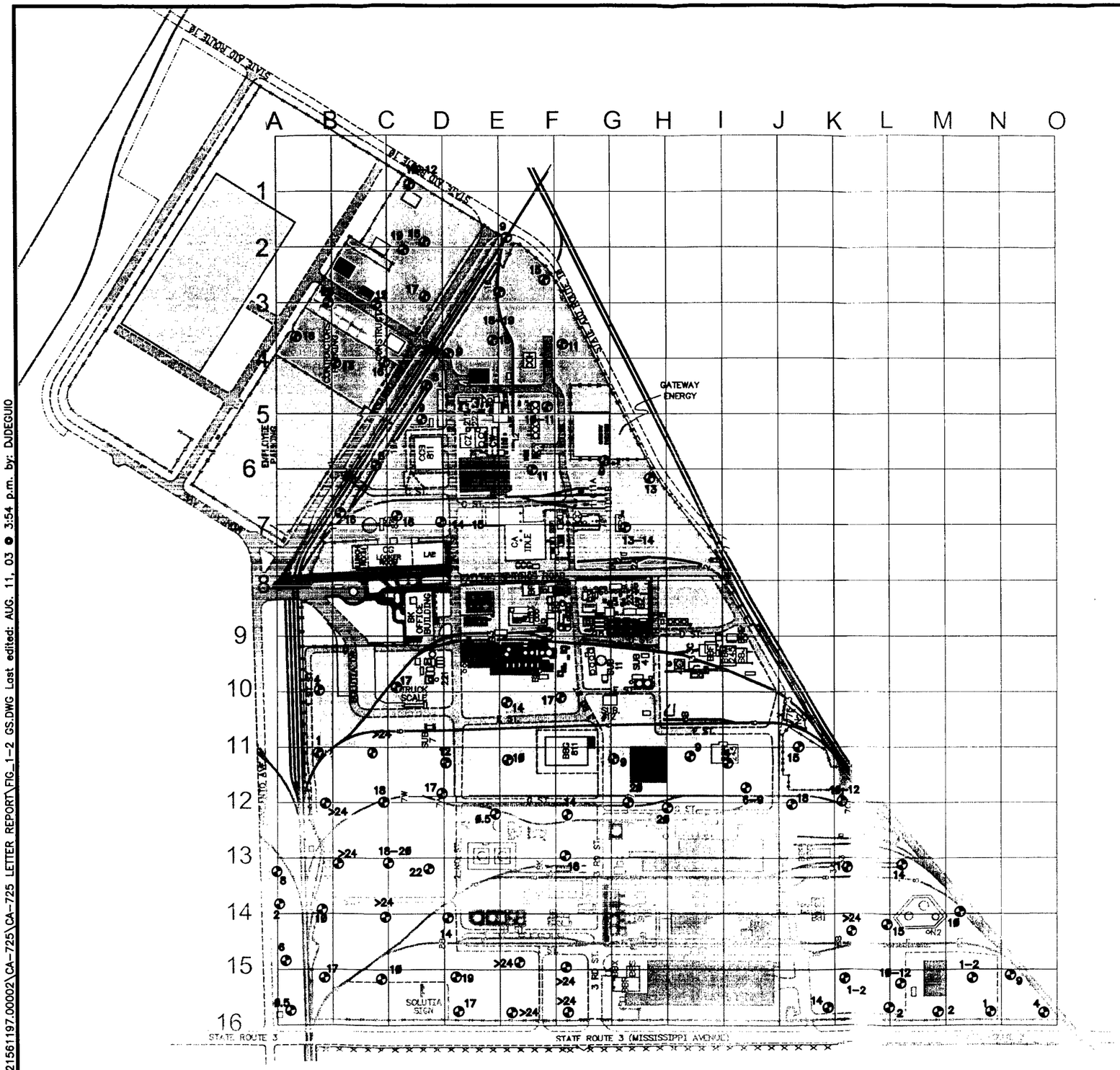
Notes:
1. UTM denotes Universal Transverse Mercator coordinate system.
2. N/A denotes gravel extends beneath total depth of boring.
3. The gravel thicknesses are believed to be accurate to within approximately one inch.
4. *Unable to determine exact depth of interface between gravel and underlying subsurface media.

Table 1 - Continued

Grid Location		UTM Coordinate		Gravel Thickness	Total Depth	Surface Gravel Description	Media Below Gravel
X	Y	(x)	(y)	(inches)	(inches)		
J	11	746377	4275620	15	18	1-inch minus	Soil
J	12	746319	4275641	18	32	1-inch minus	Sand
K	12	746274	4275563	10-12*	12	1-inch minus	Railroad Tie
K	13	746240	4275598	1	2	1/2-inch clean	Soil
K	14	746173	4275609	>24	24	Fines	N/A
K	15	746126	4275628	1-2*	8	Variable/sparse	Cinders/Soil
K	16	746089	4275654	14	18	1-inch clean	Soil/Cinders
L	13	746230	4275541	14	18	1/2-inch clean	Cinders/Soil
L	14	746172	4275571	15	18	Fines	Cinders
L	15	746108	4275571	10-12*	14	1-inch clean	Cinders/Soil
L	16	746061	4275592	2	4	Fines	Cinders
M	14	746167	4275493	10	12	1-inch minus	Cinders
M	15	746096	4275496	1-2*	6	Variable/sparse	Cinders
M	16	746054	4275542	2	4	1-inch minus	Cinders
N	15	746090	4275456	9	18	Variable/sparse	Soil
N	16	746045	4275486	1	4	1-inch minus	Cinders
O	16	746031	4275427	4	6	1-inch minus	Cinders/Soil

Notes:

1. UTM denotes Universal Transverse Mercator coordinate system.
2. N/A denotes gravel extends beneath total depth of boring.
3. The gravel thicknesses are believed to be accurate to within approximately one inch.
4. *Unable to determine exact depth of interface between gravel and underlying subsurface media



LEGEND

- GRASS
- ASPHALT
- ROADWAY
- GRAVEL
- BUILDINGS (EMPLOYEES PRESENT)
- CONCRETE
- TANKS
- ENCLOSED STRUCTURES (PART TIME)
- 18 GRAVEL THICKNESS DELINEATION POINT WITH GRAVEL THICKNESS AT THAT POINT SHOWN IN INCHES.

NOTES:

1) GRID SHOWS PLANNED DELINEATION POINTS.

2) ACTUAL POINTS VARY SLIGHTLY DUE TO THE PRESENCE OF UNDERGROUND UTILITIES, ROADS, RAILROADS AND STRUCTURES OR SLIGHT DEVIATIONS INCURRED WHILE MEASURING THE LOCATIONS IN THE FIELD.

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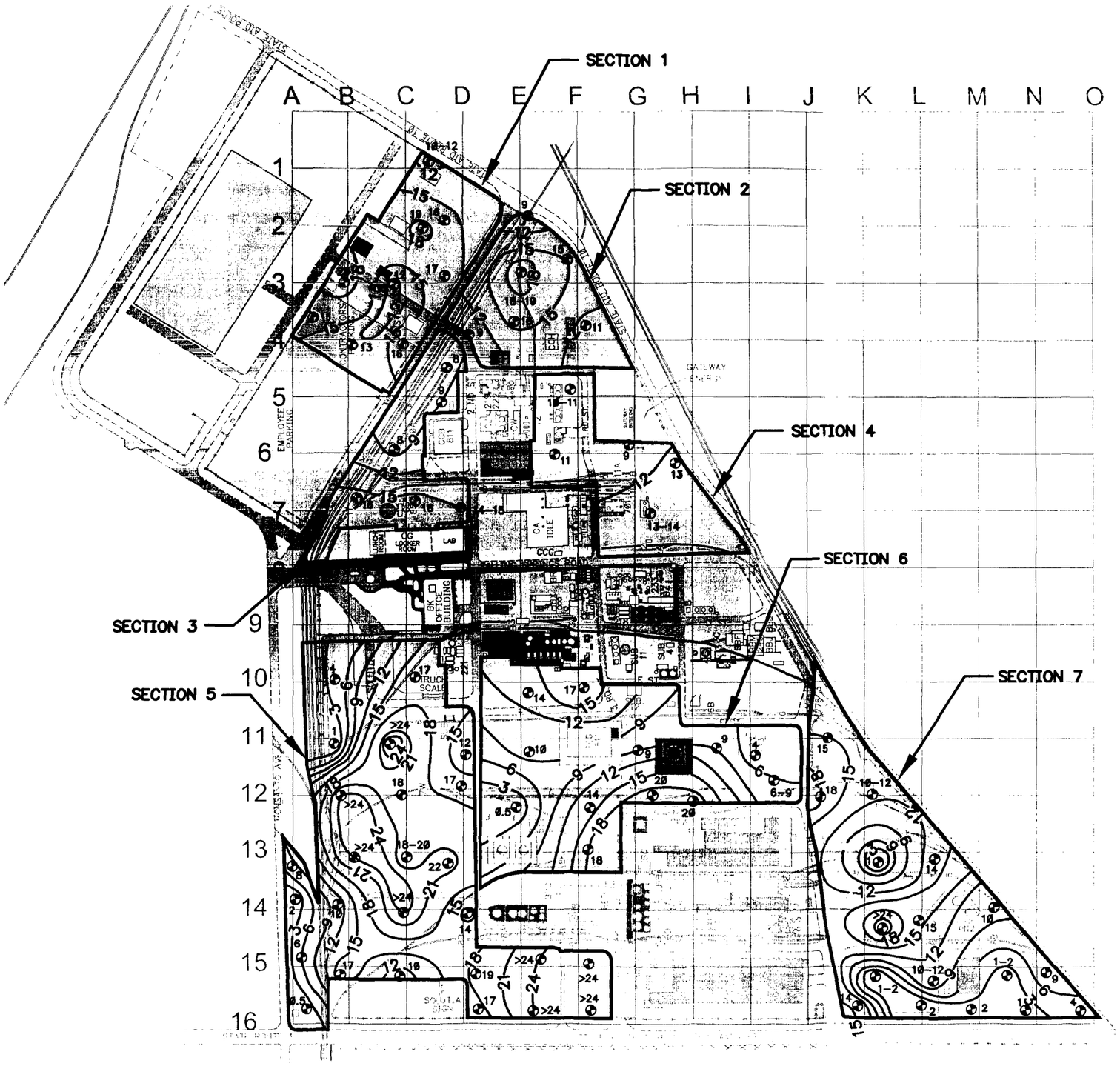
SCALE FEET

SOURCE: GRAVEL DELINEATION SURVEY, URS JANUARY 2003.

CA-725 CURRENT HUMAN EXPOSURES UNDER CONTROL SOLUTIA W.G. KRUMMRICH PLANT SAUGET, ILLINOIS		PROJECT NO. 21561197.00002
URS		
DRN. BY: djd 7/8/03 DSGN. BY: ekf/kah CHKD. BY:	Surficial Gravel Thickness Survey Boring Locations	FIG. NO. 1

File: E:\21561197.00002\CA-725\CA-725 LETTER REPORT\FIG_1-2 GS.DWG Last edited: AUG. 11, 03 @ 3:54 p.m. by: DJDEGUIO



LEGEND

- GRASS
- ASPHALT
- ROADWAY
- GRAVEL
- BUILDINGS (EMPLOYEES PRESENT)
- CONCRETE
- TANKS
- ENCLOSED STRUCTURES (PART TIME)
- 18 — GRAVEL THICKNESS DELINIATION POINT WITH GRAVEL THICKNESS AT THAT POINT SHOWN IN INCHES.
- 12 — ISOPACH LINE SHOWING GRAVEL THICKNESS IN INCHES.
- BOUNDARY OF SECTIONS USED FOR THE PURPOSE OF CONSTRUCTING ISOPACH LINES. SECTIONS IDENTIFIED AS SECTION 1 THROUGH SECTION 7.

NOTES:

1) GRID SHOWS PLANNED DELINEATION POINTS.

2) ACTUAL DELINEATION POINTS VARY SLIGHTLY FROM PLAN DUE TO THE PRESENCE OF UNDERGROUND UTILITIES, ROADS, RAILROADS AND STRUCTURES OR SLIGHT DEVIATIONS INCURRED WHILE MEASURING THE LOCATIONS IN THE FIELD.

3) ISOPACH LINES WERE GENERATED USING SURFER VERSION 7.0 SOFTWARE. THE FACILITY WAS DIVIDED INTO SEVEN SECTIONS AS SHOWN FOR THE PURPOSE OF CONSTRUCTING ISOPACH LINES OF ASSUMED GRAVEL THICKNESS. ISOPACH LINES SHOWING THE ASSUMED GRAVEL THICKNESS WITHIN EACH SECTION WERE DRAWN USING ONLY THE DELINEATION POINTS LOCATED WITHIN THE BOUNDARIES OF THAT SECTION.

N

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SCALE FEET

SOURCE: GRAVEL DELINEATION SURVEY, URS JANUARY 2003.

CA-725 CURRENT HUMAN EXPOSURES UNDER CONTROL SOLUTIA W.G. KRUMMRICH PLANT SAUGET, ILLINOIS		PROJECT NO. 21561197.00002
URS		
DRN. BY: djd 1/22/03 DSGN. BY: ekf/kah CHKD. BY:	Surficial Thickness Survey Isopach Map	FIG. NO. 2

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